# ARD ARD

March

1954

Vol. 94

No. 3





CASE NO. 401917836-X

SYMPTOMS: Patient listless . . . unhappy . . . tired of life.

DIAGNOSIS: Condition caused by Audrey's home life . . . damp, poor ventilation; rapid temperature changes, etc.

RX: Audrey needs a change! Prescribe better living conditions. A Lewis Insulating-Ventilating Cover to keep hive cooler in summer and retain more heat in winter. Allows moisture to escape. Audrey will be healthier, happier, and more productive.

LEWIS BEEWARE . . . DADANT FOUNDATIONS — perfect companions for greater production. See them at your Lewis-Dadant Dealer. If you don't know who your nearby dealer is, write to any of the below addresses.

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# THREE - PLV **FOUNDATION**

Non-sagging Non-stretching

Withstands Hot Weather

More worker cells Less drone cells

For efficient, profitable combs use THREE-PLY

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# ITALIAN PACKAGE BEES Special Truck Prices Book Your Order Early. FOSTER APIARIES Box 239, Colusa, Calif.

#### ITALIAN BEES AND QUEENS

Account to the contract of the contract of

Health certificate with each ship-ment. Live arrival guaranteed.

2-lb. pkg. w. queen 32.90

3-lb. pkg. w. queen 3.80

4-lb. pkg. w. queen 4.70

RAYMOND McFARLING Shannon, Miss.

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Nuclei Made to Order Prices Postpaid-Airmail \$1.90 Each 15 or more \$1.25 Each Less than 15

Personally Raised Top Quality Italians

ONEENZ



Hazel-Atlas Glass Company Wheeling · West Virginia

#### GET OFF TO A GOOD START

Little's Queens are good honey gatherers, they are gentle to work with, not bad to swarm, winter fine.

> Kenneth Russell Turner, Oregon

With Little regular selected Italians or Little Starline Hybrids, in each colony in early spring, you are off to a good start on your new production year. You will get fast building and a heavy field force by flow time, That's the secret of profitable production. We guarantee safe arrival, health certificate, prompt service. All queens are raised under expert personal supervision. Our aim is quality not quantity.

We produce two quality strains-Dadant's Starline Hybrids and John Davis Italians.

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(based on John Davis Italians)

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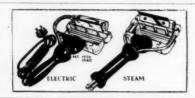
For Dadant Starline Hybrids add 25c per item.

AUGA

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HAHIRA - New Lewis-Dadant Branch, Hahira, Georgia, serving the Southeast. Carloads of Lewis Beeware and Dadant Foundations.

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#### ITALIANS

#### CAUGASIANS

Good Bees

Good Queens

Good Service

We are prepared to load your truck, ship by Express or Parcel Post, and we appreciate your order, large or small. Let us book your order now, no deposit required.

#### Our Prices

| Lots of- | Queens | 2-pound & queen | 3-pound & queen | 4-pound & queen | 5-pound & queen |
|----------|--------|-----------------|-----------------|-----------------|-----------------|
| 1 - 24   | \$1.15 | \$3.50          | \$4.40          | \$5.30          | \$6.20          |
| 25 - 99  | 1.05   | 3.25            | 4.10            | 4.95            | 5.80            |
| 100-499  | .95    | 3.00            | 3.80            | 4.60            | 5.40            |

Tested queens \$2.00 each

Queens Postpaid-Airmailed or Clipped at no extra cost.

For Queenless Package Deduct Price of Queen Packages F. O. B. Shipping Point

## THE STOVER APIARIES

Mayhew, Mississippi

#### Italian Package Bees and Queens

| Quantity<br>(packages) | 2-lb. with queen  | 3-lb. with | 4-lb. with |
|------------------------|-------------------|------------|------------|
| 1 to 25                | \$3.00 ea.        | \$4.00 ea. | \$5.00 ea. |
| 100 or more            | 2.85 ea.          | 3.75 ea.   | 4.65 ea.   |
| OI                     | EENS: \$1.00 each | Postpaid.  |            |

GOLD LEAF APIARIES

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A CONSTANT MARKET FOR YOUR BEESWAX

DADANT & SONS, Inc. HAMILTON, ILLINOIS

# Looking Forward

We hope you are "Looking Forward" to the coming season, making plans, and awaiting the arrival of our 1954 listing of supplies. Remember our policy—of selling direct to the beekeeper.

For anything, and everything in the Apiary

—Consult our catalog first.

# MARSHFIELD MFG. COMPANY, INC.

MARSHFIELD. WISCONSIN

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Write for Catalog.

# QUEENS and BEES

You can't go wrong starting the season with RICH queens. This is our own strain produced for our own honey production. You will get more honey at less cost than with other strains.

#### Packages with Rich Queens

| 1-24   | 2-Lb.<br>\$3.50 | 3-Lb.<br>\$4.50 | 4-Lb.<br>\$5.50 |
|--------|-----------------|-----------------|-----------------|
| 25-99  | *               | 4.25            | 5.25            |
| 100 Up | 3.00            | 4.00            | 5.00            |

#### Rich Queens

| 1-24   | \$1.20 |
|--------|--------|
| 25-99  | 1.10   |
| 100 Up | 1.00   |

#### RICH HONEY FARMS

Jeanerette, Louisiana

# YORK'S PACKAGE BEES and QUEENS FOR 1954

7,500 Colonies Quality and Service

Your Choice of Two Outstanding Strains
Quality Bred Dadant's Starline 4-Way Hybrids
Quality Bred Italians



The Preference of Leading Honey Producers

#### Packages with Italian Queens

| Quantity | 1-24   | 25-99  | 100 up |
|----------|--------|--------|--------|
| 2-lb.    | \$3.75 | \$3.50 | \$3.25 |
| 3-lb     | 4.75   | 4.50   | 4.25   |
| 4-lb,    | 5.75   | 5.50   | 5.25   |
| 5-lb.    | 6.75   | 6.50   | 6.25   |
| Queens   | 1.25   | 1.15   | 1.05   |

Above prices are for/or with our regular line Italians. For DADANT STARLINE 4-WAY HYBRIDS add 25c each additional. For TESTED QUEENS add \$1.00 each additional. For QUEENLESS PACKAGES deduct \$1.00 per package.

Shipments are made by express, parcel post, or your truck. Detailed shipping information available. Trucks loaded from 7,500 colonies in a minimum of time. Fast service on queens from 7,000 nuclei. BOOK-ING ORDERS NOW for choice shipping dates.

YORK BEE COMPANY

Jesup, Georgia, U.S.A.

(The Universal Apiaries)



#### THE AMERICAN BEE JOURNAL

Vol. 94, No. 3

HAMILTON, ILLINOIS

March, 1954

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# The Finest Honey Sections

We also carry a complete line of Beekeepers Supplies

Write for Our 1954 Price List

Boyd, Wisconsin

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The Honey Bee Improvement Co-op Assn. and Rossman Apiaries have entered contract for the production of Island (Kelleys) Hybrid Queens another year.

Island Hybrid Bees are produced by crossing two inbred lines to produce the virgin. When mated to a drone produced from another two lines the result is an outstanding bee possessed of full hybrid vigor. They have been tested both by U.S. and Canadian Bee Culture.

Reserve your date by placing order at once.

2 lb. bees with Hybrid q. \$3.65 each \$3.40 each 3 lb. bees with Hybrid q. 4.65 each 4.40 each For regular queens deduct 25c from above prices.

"They Produce"

## **ROSSMAN APIARIES**

P. O. Box 133

Moultrie, Ga.

#### OUR COVER PICTURE

Our own montage. Upper left of clipped queen and bees came originally from a genetics student working with Dr. L. R. Watson; right, pear bloom by J. C. Dadant. Center left, wild plum by Paul Hadley; center, outdoor colony (source unknown); right, black locust bloom by Pellett. Lower left, apple blossoms by G. A. Pauli; right, apiary of Myron Frisque, Green Bay, Wisconsin.



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- Top Quality
- Moderately Priced
- Personalized Attention to Each Order
- Prompt Shipment

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Box 3269 Higginsville, Mo.

# Three-Banded Italian Package Bees and Queens

Shipped Anywhere in United States and Canada

#### 1954 Prices - Delivered Prepaid

|         | Queens<br>(each) | 2-1b. & queen | 3-1b. & queen | 4-lb. & queen | 5-lb. & queen |
|---------|------------------|---------------|---------------|---------------|---------------|
| 1- 24   | \$1.10           | \$4.00        | \$5.00        | \$6.00        | \$7.00        |
| 25- 99  | 1.00             | 3.75          | 4.70          | 5.65          | 6.60          |
| 100-499 | 95               | 3.50          | 4.40          | 5.30          | 6.20          |
| (For    | queenle          |               | ages de       | educt p       | rice          |
|         |                  | - dee         | /             |               |               |

- Guaranteed safe arrival
- Health Certificate with each shipment
- Queens clipped and painted if desired
- Shipper rated in Dun & Bradstreet

TERMS: One-third with order, balance 10 days before shipment.

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On the same old basis—QUALITY, SERVICE, SATISFACTION Live delivery guaranteed on all shipments. 10% deposit books any order. 2-lb. pkg. with queen 8 3-lb. pkg. with queen \$

Queens Special Prices to Those Who Truck.

Write for discount on orders over 25 packages.

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Phone 2415, Moreauville

Box 33, Moreauville, La.

#### BETTER BRED QUEENS

Three Banded Italians

Join the increasing number of beekeepers who are using our "Better Bred Queens" and bees. Year after year repeat customers have proven our stock, service and responsibility are good. Plenty of bees for April 1st. Shipment at the following prices:

|    |    | Q    | ucen: | 2-1b w/q | 3-1b. w/q |
|----|----|------|-------|----------|-----------|
| 1  | to | 18   | 81.15 | 83.25    | \$4.15    |
|    |    | 99   | 1.05  | 3.10     | 4.05      |
| 99 | or | more | 1.00  | 3.00     | 4.00      |

Write for prices in larger quantities.

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Calvert, Ala.



# — The Home of Good Queens — ALAMANCE BEE COMPANY

Graham, North Carolina

Breeders of Three Banded Italians and Dadant's Starline Hybrids.

|                 | Queens      | - PRI              | CES -           | Packages  |                                     |
|-----------------|-------------|--------------------|-----------------|-----------|-------------------------------------|
| 1-24            | Italians    | Starline<br>\$1.50 |                 | wo Pound  | ian Queens<br>Three Pound<br>\$4.50 |
| 25-99<br>100-up | 1.10        | 1.40               | 25-99<br>100-up | 3.25      | 4.25                                |
| Extra Bees \$1. | 00 a pound. | Por Packages       | with Starline Q | ueens add | 25c per package.                    |



BEES QUEENS

KELLEY—"The Bee Man"

orders, any combination.

Trade Mk. Reg.
U. S. Pat. Off.
Bee Man"

Three - banded Italian bees and KELLEYS ISLAND improved hybrid queens direct

from our own bee farm. Shipments start April 1st — express or parcel post shipment. Thousands of extra queens.

 KELLEYS ISLAND
 2-Lbs. Bees & K. I. Queens
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 Each
 \$1.10 air mail
 \$3.50
 \$4.50

 5% DISCOUNT on \$50.00 and 10% DISCOUNT on \$100.00

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Italian BEES and QUEENS

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Custom Rendering
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## S1.15 up to 51

Larger lots write for prices. Queens from stock of 250 to 300 lbs. productions mated to drones of similar stock.

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Health Certificate

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# WILLIAMS ITALIAN QUEENS Large Leather-Colored Three-Banded QUALITY SUPREME

| Certific | ate | with   | each | ship | ment |
|----------|-----|--------|------|------|------|
|          |     | tpaid  |      |      |      |
| 10-99    |     |        |      |      |      |
| 100 uj   | P   | ostpai | d    |      | 70c  |
|          | Air | Mail   | Ext  | ra.  |      |

DR. WILLIAMS APIARIES
115 W. Sterling St. Baytown, Texas

# Girardeau Apiaries Tifton, Ga.

Shippers of Italian Package Bees and Queens

We Work Your Beeswax and Purchase All Grades of Honey.

We pay you the best prices for quality honey and beeswax. Write for our new 1954 catalog. THE FRED W. MUTH CO. 229 Walnut St., Cincinnati 2, Ohio

# ITALIAN Package Bees & Queens

Live delivery guaranteed and health certificate with each shipment. 10% books your order. Balance 10 days before shipment.

#### Prices-

| 2-1b. | Pkg. | with | Queen | \$3.00   |
|-------|------|------|-------|----------|
| 3-1b. | Pkg. | with | Queen | 3.90     |
| 4-1b. | Pkg. | with | Queen | <br>4.85 |
| Quee  | ns   |      |       | 1.00     |

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"Originators of Frame-Grips"
Your leading Bee Dealer will have our Utility Model, Priced at \$2.45. Deluxe Model, Priced at \$2.75. or send to

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#### Ask for Our NEW 1954 CATALOG



The A. H. HALE CO. Hapeville, Georgia

#### PLANT'S Bees Are Productive, Gentle, Easy to Handle



Large vigorous queens. Packages are 25% overweight. Young bees. No drones. Shipped on time in light cages. Health certificate on all shipments. Live arrival and satisfaction guaranteed.

|               | ,            | Launages | WILL REGISSIS | queens |
|---------------|--------------|----------|---------------|--------|
|               | 1            | to 24    | 25 to 99      | 100-u  |
|               | ************ |          | \$3.25        | 83.00  |
| 3-lb. package |              | 4.50     | 4.25          | 4.00   |
| 4-lb. package | ****         | 5.50     | 5.25          | 5.00   |
| 5-lb. package |              |          | 6.25          | 6.00   |
| Queens        |              | 1.10     | 1.05          | 1.00   |

W. E. PLANT Hattiesburg, Rt. 2, Miss.

# PACKAGE BEES "GULF BREEZE" QUEENS

- NOTICE -



We specialize in early queens and packages. Shipping starts first week in March.

For better results and better service . . . and remember that our special shipping cages SAVE on express charges.

Get delivered prices before you order and the savings will amaze you.

#### PRICES:

| Quantity | Queens | 2-lb. Pkg. W.Q. | 3-lb. Pkg. W.Q. | 4-lb. Pkg. W.Q. |
|----------|--------|-----------------|-----------------|-----------------|
| 1-24     | \$1.15 | \$4.35          | 84.25           | \$5.25          |
| 25-99    | 1.10   | 3.25            | 4.15            | 5.15            |
| 100-up   | 1.00   |                 |                 |                 |

#### **BESSONET BEE COMPANY**

Donaldsonville, La.

# Sammannan mananan kananan kananan kananan kananan kananan kanan kanan kanan kanan kanan kanan kanan kanan kana



#### QUALITY ITALIAN Bees and Queens

2-lb. with Queens 3-lb. with Queen Extra Queens (Airmail) Airmail

> Wilkes Apiaries Hamburg, La.

#### QUEENS - PACKAGE BEES FOR 1954

Maximum production is most easily assured with superior bees and queens. That's one way we try to help you make money. Superior bees and queens is our motto at all times.

THE VICTOR APIARIES Uvalde, Texas



#### CAUCASIANS CARNIOLANS

Hardy, prolific, rapid build-up, finest of work-ers, GENTLEST OF ALL RACES. GENTLE-

NESS saves time, sweat, patience, work; safest in towns, near neighbors or near highways. Morthern breeders used. Untested queens \$1.20 ea. Air Mail. Discount on quantity orders. Ask. Ready March 1st. Over 25 years a queen breeder.

ALBERT G. HANN LA BELLE, (South) PLORIDA

#### ITALIAN BEES AND QUEENS

3-lb. with queen 4-lb. with queen

Deduct \$1.00 for queenless packages. Health certificate, full weight and live delivery guaranteed.

DAIGREPONT APIARIES Hessmer, La.



#### FRAME GRIP NO. 400

For easy handling of hive frames get the new spring action Atcolite Frame Grip. Heavy cast Aluminum. Prompt shipment. Satisfaction guaranteed.

Only \$2.50 at your dealers or will ship direct at 25c for handling and postage.

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Renew Your Subscription



# S WE SEE IT

#### EDITORIAL.

#### **Diverted Cropland** May Benefit You . . .

Diverted cropland is providing knotty problems for Federal farm men, according to a recent report in the Wall Street Journal. Official curbs on this year's plantings of wheat, corn and cotton are due to free 30 million acres for other crops.

The report further points out that growers are expected to increase plantings of soybeans by as much as 4 million acres, California cotton growers planned to increase plantings of the late spring watermelon crop by as much as 10 per cent, and 1954 plantings of grain sorghums may be the highest in a decade.

But the Journal's report cites a certain amount of risk of surplus and resulting lower prices for growers of these crops. Further, a very large acreage still is available for the planting of "other crops."

It appears logical to us that there will occur in 1954 an increased planting of legumes to conserve soil and to improve its fertility while providing a potential income to the grower through hay and seed; to increase forage for livestock as a means of maintaining farm income.

Increased acreage of legumes will benefit honey producers; it offers to them the potential of income from the pollination services of honey bees. Producers are advised to be alert to the changes in agriculture that may take place in their area, to actively cooperate with growers for the best interests of both parties, and to be ready to take advantage of whatever opportunities arise.

#### Do We Awaken or Continue to Sleep? . . .

Another successful industry convention took place in Baltimore and, as we see it, the organizations of the industry are improved and off to another year of service of benefit to your welfare and mine. The extent of their efforts and the amount of good that will return to us is directly dependent upon the amount of support we give to these organizations.

We are referring to the American Honey Institute, the American Beekeeping Federation, the Honey Industry Council, and the Honey Packers and Dealers Association. We include the latter because at Baltimore they adopted a voluntary plan of collecting one cent per can of honey purchased by them from a producer, to which they agreed to add one cent per can. It was estimated that it would be possible in this way to raise approximately \$25,000 for the promotion of honey. States with marketing agreements will not be included in this attempt.

#### Congratulations Henry And George . . .

We feel it highly appropriate at this time to congratulate Henry Schaefer, 1953 president of the American Beekeeping Federation, for a splendid year of service in the best interests of beekeepers throughout the country. We also wish to express our appreciation to the official family of the Federation and others who aided him.

We extend to Henry, as he continues as president for 1954, to Howard Foster, his vice president, and to the rest of the official family, our best wishes for the coming year and pledge them our support.

We also think it appropriate to say to George Abrams and the Maryland Beekeepers' Association, "Our sincere compliments for a job well done!" You were excellent hosts. You put on an outstanding convention. Your displays and exhibits made everyone who entered the Hotel aware that a convention of the honey industry was taking place.

### Low Prices **Top Quality**

Our customers say our Italians are gentle and store more honey. Over 90% young bees. No drones. Prompt shipment in light cages. cages.

Health certificate. Live arrival guaranteed.

2-lb. pkg. with queen ... \$2.75 Any 3-lb. pkg. with queen ... 3.50 number Queens ...... 1.00

Add 75c per pound for larger packages.

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\$3.00 \$3.00 \$2.75 4.1b, pkg. \$4.75 4.00 3.75 3.50 5-1b, pkg. 5.50 Package prices are F.O.B. Live delivery guaranteed.

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The repellent odor also gives a warning when it is getting through a hole in the inner wall and you can seal it out of the house although it has "more bark then hite".

the inner waii and you can seal it out of the house although it has "more bark than bits."

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## Panel Members

#### Carl Kalthoff

Lexington, Missouri Producer of bulk and extracted honey and honey distributor

#### Roy A. Weaver

Navasota, Texas Producer of package bees and queens, and honey

#### Charles Hofmann

Janesville, Minnesota Extensive extracted honey producer

#### E. A. Hogarth

Tara, Ontario One of Canada's largest honey pro-

#### Earl C. Robinson

Oelwein, Iowa Mid-west honey producer

#### Lee R. Stewart

Newport, Indiana Producer of both bulk comb and extracted honey

#### Henry Hansen

Dakota City, Iowa One of the largest all-package honey producers

#### Walter Diehnelt

Menomonee Falls. Wisconsin Honey distributor and honey producer

#### Milton H. Stricker

Annandale, New Jersey Extensive pollinator and honey producer

Good combs are a long time investment and represent the greatest cost in a complete colony equipment. With good all worker combs, not as many are needed per colony which means less equipment, less cost in operation, greater profit. Perfect combs, especially in brood areas, have a decided mark-up effect on the crop. The importance of worker size cells is evident by making a comparison with drone size in any given area. There are about 63% more possible worker cells than drone cells. Every hundred drones eliminated and replaced with workers means about 163 workers in the same space. Poor combs mean that much of the worker field force may be lacking at flow time and there may be a reduction in nurse bees to care for the successive areas of worker larvae.

However, the culling of combs and their replacement with good combs is one of the most sadly neglected of beekeeping practices. James I. Hambleton once said, during the war when beeswax was needed. "The drastic culling of combs is productive and results in more beeswax. It should also give the beekeeper more honey as he will be using better combs." Comb culling still remains one thing most producers expect to do sometime but few get around to doing it.

Roy Weaver, the one package producer on the panel, says that, to shake packages, colonies must be running over with bees. With poor combs there may be so many drones that screening them out slows down caging and they may clog the shaker box so workers cannot run through. In honey production the effect of poor combs also shows up in the honey house because the uncappers and extractors are both slowed down, and there is not as much honey in the supers.

#### What Kind of Combs to Replace

In The Brood Nest-The amount of drone in brood combs is a common measure of poor combs. Also listed as poor are combs that are dry and hard, combs heavily propolized, damaged by moth or broken, or those whose cells have become misshapen or small from years of use and accumulated cocoons.

The amount of drone comb tolerated in the brood nest, in the opinion of those on the panel varies from an amount no larger than a silver dollar to a total of five square inches on both sides of the standard comb. Patches of drone in normal brood areas are seldom tolerated. Drone toward the top bars or the bottom corners or sides is not so objectionable. According to Hansen, 25% drone in these places is tolerable. According to Dadant, queens sometimes persist in laying drone eggs heavily and their demand for drone comb seems to result in the construction of more drone comb than normally. Such queens should be replaced.

Super Combs-There is a big difference of opinion about the use of dark combs in supers. The most important point is whether or not they discolor honey. Perhaps Hofmann sizes it up best this way: It is usually considered that honey from dark combs is darker than honey from white combs and this may be true but it may not be caused by the blackness of the combs. The color alone probably has little or no effect on the honey. If the honey from black combs is darker, it was probably that way when the bees put it there. Bees have an aversion to white combs and won't store honey in them until the honeyflow is

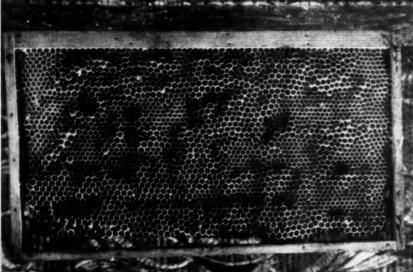
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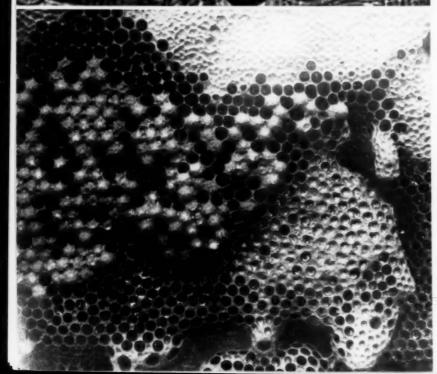
Hamilton, Illinois Authority on comb building, wax secretion and comb measurements

#### Roy A. Grout

Hamilton, Illinois Laboratory research in the behavior of comb building and acceptance testing







well under way so they usually store only the white kind of honey later in the white combs. Honey left from spring bloom or from previous years will be in the upper corners of the dark combs where it was stored near the brood and even minor remnants of dark honey will have an effect on the final color grade. So the measure of color change is perhaps not in the color of the combs or in their age, perhaps it is more in the behavior of the bees in relation to honey storage. Some of the difference in color may be due to the fact that uncapping knives slice through varying amounts of stored pollen which may be mixed with the honey in the dark combs. This may change color and also produce turbidity. Also any tiny specks of comb will be dark in color and more evident than the same amount of comb particles in the honey from light

There is little justification in destroying a good comb just because it is dark or black but whether or not it should be used in the super is a matter of choice in practice and the actual effect on honey color. Dark or black combs in the brood nest are an asset.

And on this matter of color, comb content, weight and age, the panel disagrees, as far as super combs are concerned. The heavy dark comb in the super does make the super heavier. Some think the bees will not store as much honey in the dark heavy combs in the super, although there is little objection to the use of super combs that have had a few cycles of brood in them to toughen them, make them easy to handle in the extractor and yet not be really dark. Some operators do not worry at all about dark combs in the extracting supers. They are stronger. will not break as easily and some of the panel do not think that the color of the comb, in itself, has any bearing on the color of the honey.

Some use their second rate combs for the supers regardless of color, discarding them only when they become objectionably poor for some reason other than color. Some like to have a few dark combs in the supers to draw up the bees. However, queens also show a preference for dark combs and so they may be

Top—Corner cut comb; otherwise good. May be filled in with drone.

Center-Altogether no good.

Bottom—Damage in lower half of comb that has been filled in with drone and with heavy, thick wax of no value.

American Bee Journal

drawn into the supers objectionably when any great amount of dark comb is used. The location of brood in supers when shallow supers are used can be controlled more easily than when full depth supers are used.

Perhaps the final word about possible discoloration of honey because of comb content is given by Robinson who says that if one uncaps a dark comb of honey and lets it drip into a pan and does the same with a white comb of honey, produced at the same time in the flow, the color difference is noticeable and, of course, if the color difference is objectionable, that's the answer. Hogarth also poses a clincher when he says "No one would try to produce show honey in dark combs." So the whole question is one of expediency. preference and actual comb content; not color.

#### When to Cull Combs

Perhaps this can be summed up in remarks from the panel members which amount to this: All year long, any time we find them. The application of this is not exactly true because combs naturally divide themselves into two classifications, those in the brood nest and those in the supers.

When should brood combs be culled? Removing undesirable combs from the brood nest is not always a do-it-now procedure. In early spring, when two or more hive bodies are used for colonies, the bottom body may be largely vacated and it is relatively easy to remove combs in these bodies at this time; if it is the practice each year to reverse bodies, then about every two years there should be a pretty good job of culling in each body every other year.

Another common practice is to withdraw poor combs when they do not contain anything of value to the colony like pollen or honey and place them above an excluder in a hive body over any colony in the yard doing this all through the season. If they have some brood in them it emerges, honey will probably be stored in them to some extent, and during the extracting period they may be discarded. Some make a practice of marking the top bars with a colored chalk or with thumb tacks and working these combs up into supers and away from the brood nest at every opportunity. When running across these marked combs during extracting, they may then be discarded.

A package bee operator can discard combs every fall and winter because he will have no bees then on the brood nest combs and discarding is relatively easy.

Some make it a practice of culling out a percentage each year, such as 10% or one or two combs per brood nest. Perhaps this is a minimum urge rather than a maximum practice. If it were possible to take out all the poor combs, it would be better but this often cannot be done. On the other hand, if culling the brood nest combs is a casual job it may not be done. Attention should be given to it at specific times. suited to your management or your season, in other words it should be a part of regular practice and not an incidental procedure or it won't be done.

As for super combs, the culling may be done at extracting time. Combs may be sorted as they come from the extractor, dividing them into piles, white, black, culls or pollen heavy combs. The white combs may be piled away and covered. The black ones are piled away and moth proofed. The culls are set aside for rendering and the pollen laden combs are piled separately and moth proofed to use in the brood nest in spring. This is Hofmann's method.

Hogarth has a similar plan. His sorting is also into four groups: No. 1, dark combs practically free of drone which will be used in the brood chambers. No. 2, white combs practically free of drone which may be used either in brood chamber or super. No. 3, combs not good enough for brood but valuable for super combs, with not too much drone, and, No. 4, combs with excess drone, stretched, damaged, or with split or broken top bars, heavy dark combs with large amount of excessive wax. These are the combs to be rendered.

Also at extracting time when the combs are uncapped, excess wax on the edges of the frames may be scraped off as they handle much better and the wax obtained will pay for the labor of sorting and culling. A good hive tool, ground square on the end, touched up frequently on the emery, does a good job, especially if the combs are not too warm.

#### How to Secure Combs for Replacement

We all know that bees in a good flow will draw out combs from full sheets of foundation without cutting down materially on the honey crop. The bees are then secreting wax and

if they have no place to use the involuntary secretion, they may even start swarm cells. Giving bees some foundation to work may actually increase the total crop by keeping up the morale of the colony. So the best way to get new combs for replacement is to give the bees foundation above the brood nest in a good honeyflow when involuntary wax secretion is at its best. This will supply combs which, after being extracted, may be then used to replace combs that have been discarded.

Hogarth likes to have his new combs drawn out in the dark flow in August when the honey is not so valuable and when the flow is such that the bees readily work the foundation. This also helps to crowd more of the honey into the brood chambers for winter.

A variation of using full sets of foundation above the brood nest is some method of alternating comb with foundation, particularly under less favorable flow conditions.

The use of full sheets of foundation in the brood nest at either side, two or more to each body, when bees are secreting wax, is also a fair way for direct replacement. This is a practice which can easily be abused. When conditions are unfavorable, it will not work well. However, we have used it for years with good success particularly when previous flows were unfavorable for the production of combs from foundation in supers above the brood nest.

Do not try to get foundation drawn into good combs during periods that are not favorable for wax secretion. Bees may damage the foundation, gnaw it out irregularly, or abuse it in some way which will almost be certain to bring poor results.

New combs drawn, from well reinforced foundation, should contain worker cells from side to side and top to bottom. When you are putting up the foundation be sure to embed wires so as not to cut or bruise the wax. Any thumb marks or other damage may result in drone combs. Combs represent an investment of about 50 cents each; and have four common enemies, man, machinery, mice and moth.

#### What to Do with the Culled Combs

This seems obvious. They should be melted or used in some way as an interim use between culling and melting.

Stewart operates 10 to 20 per cent standard five frame queen rearing (Turn to page 104)

# Beekeeping Management for the Bee Breeder

by Harry H. Laidlaw, Jr.

N CONDUCTING a bee breeding program the bee breeder must devote much of his time and attention to beekeeping operations. Such things as care of the colonies, the rearing and maturing of virgins and drones, and manipulations to insure that each test colony is encouraged to develop and produce to its maximum capability, are more beekeeping operations than breeding ones, but they are all essential to a breeding program.

Much of the beekeeping of bee breeding is routine, but some of the techniques are adapted especially to breeding work. In bee breeding, where queens and drones of many different lines are reared within a short period, it is essential that not only the identity of the queens and drones be definitely known but also all of the operations concerned with their production, with insemination of queens, and with the establishment of testing colonies, must be

fitted into a definite time schedule so the work load is evened out over the period these operations are being performed.

If the breeding values of the queens are to be determined the queens must be reared under optimum conditions and the colonies they are to head must be established and maintained in a similar manner. Finally, the observations which are made of the colonies must constitute clear colony descriptions, and must be permanently recorded. It is the purpose of this paper to discuss in some detail the manner in which these matters are handled at the University of California, Davis.

#### Planning the Work

One of the most important single factors in the smooth operation of a breeding program is an overall seasonal plan into which a schedule of operations can be fitted. Such a plan insures that the desired matings will be made and that the virgins

and drones will be ready for use in an orderly and timely sequence.

The seasonal plan should be as simple as possible to eliminate errors and to reduce record keeping to a minimum. The writer uses a form for this purpose, Fig. 1, which is divided into four main sections: Stocks and Matings, Drones, Virgins, and Inseminations.

Before the active season gets underway, the queens selected to be mothers of the virgins and drones are listed under the Stocks and Matings section, and the pairing of the mothers of the virgins with mothers of the drones specifies with which drones the virgins will be mated. The yard locations of these mothers are indicated by the colony numbers, and the queens are identified by their queen numbers. The identities of the breeding queens' own mothers, in turn, and the mothers of the drones to which the breeding queens themselves were mated are shown

|            |            |                   |            |          |                       |        | MA            | TINGS                |                        |                         |                |                   |                       |                      |         |                           |      |      |
|------------|------------|-------------------|------------|----------|-----------------------|--------|---------------|----------------------|------------------------|-------------------------|----------------|-------------------|-----------------------|----------------------|---------|---------------------------|------|------|
|            |            | 510               | CKS and MA | TINGS    |                       |        |               |                      | DRO                    | INES                    |                |                   |                       |                      | VIRGINS |                           |      | INSE |
|            |            | s Hother          | Virgin     |          | a Mather<br>Green No. | F      | Comb          | Comb<br>in<br>Feeder | Cage<br>Drone<br>Brood | Drone<br>Emerg.<br>Date | Coge<br>Draves | Decrees<br>Moture | Comb<br>in<br>Breeder | Comb<br>in<br>Feeder | Graft   | Cells<br>out and<br>Excl. | Clip |      |
| olonyNe Qu | B12        | Moting<br>B6 x B6 | Mating M-D | Meting   | Glosen No.            | Lalary | 3-46-53       | A 14                 | 4-7                    | 4.9                     | 4-11           | 4-19              | 3-29                  | 3-30                 | 4-3     | 4-/3                      | 4-15 | 12   |
|            |            |                   | M-D        |          |                       |        | 3.40.33       | 3-20                 | 4-/                    | 4.4                     | 4-11           | 9-14              | 3-24                  | 3-30                 | 4-3     | 4-/3                      | 4-13 | 9 2  |
|            | 814        | 84 x 84           | M-D        |          |                       |        | -             | -                    |                        | -                       | -              | •                 | -                     |                      | -       |                           |      |      |
|            | 010        | U8 x 54           | -          | 117 4117 | 1111                  | 103    | :             |                      | -                      | -                       | -              | -                 |                       | •                    |         |                           | -    |      |
|            | 112        | U7×U7             | 5-5        | U7 × U7  | U11                   | 182    |               |                      | _                      | -                       |                | -                 |                       | -:                   |         | -                         |      | -    |
|            | 1114       | U9XU9             | out        | 84 x 84  | B/4                   | 140    | Above         | 2                    | 2 12                   | 1                       | 4              |                   |                       |                      | -       |                           |      |      |
|            | H9         | H6×H6             | M-D        |          |                       |        | 3-23          | 3-27                 | 4-14                   | 4-16                    | 4-18           | 4-26              | 4-5                   | 4-6                  | 4-10    | 4-20                      | 4-22 | 4.5  |
|            | 410        | H8×H8             | M-D        | 04.04    | 0.14                  |        | -             |                      | *                      | -                       |                | -                 |                       |                      |         | -                         | -    | :    |
|            | 4/2        | H5×H5             | out        | 84 x 84  | B14                   | 140    | Above         |                      |                        | -                       | -              |                   | -                     | *                    | -       | _                         |      | 1    |
|            | C14<br>C15 | CI2 XCI3          | M-D<br>S-S | CI2 XCI3 | C14                   |        | 3-23<br>Above | •                    | -                      |                         | -              |                   |                       | •                    | 61      |                           |      |      |
|            |            |                   |            |          |                       |        | -             |                      |                        |                         |                |                   |                       |                      |         |                           |      |      |
|            |            | -                 |            |          |                       |        |               |                      |                        | -                       |                |                   |                       |                      |         |                           |      |      |
|            |            |                   |            |          |                       |        |               |                      |                        |                         |                |                   |                       |                      |         |                           |      |      |
|            |            |                   |            |          |                       |        |               |                      |                        |                         |                |                   |                       |                      |         |                           |      |      |
|            |            |                   |            |          |                       |        |               |                      |                        |                         |                |                   |                       |                      |         |                           |      |      |
|            |            | - m - m - m       | -          |          |                       |        |               |                      |                        |                         |                |                   |                       |                      |         |                           |      |      |
|            |            |                   |            |          |                       |        |               |                      |                        |                         |                | -                 |                       |                      |         |                           |      |      |
|            |            |                   |            |          |                       |        |               |                      |                        |                         |                |                   |                       |                      |         |                           |      |      |
|            |            |                   |            |          |                       |        |               |                      |                        |                         |                |                   |                       |                      |         |                           |      |      |
|            |            |                   |            |          |                       |        | 1             |                      |                        |                         |                |                   |                       |                      |         |                           |      | -    |

Fig. 1. Seasonal form for record keeping.

under the subsection "Mating." The general types of mating of the virgins, such as sister-sister, motherdaughter, outcrossing, etc., a re shown under "Virgin mating."

This listing is a statement of what is to be accomplished in the way of producing inseminated queens. The next step is scheduling the operations and this must wait until the active season begins. In the meantime the breeder should decide on (1) the number of colonies which can be operated. (2) the number which can be established per day and per week, (3) the number of queens which will be inseminated per day and on which days of the week, and (4) the number of sister queens to be included in each family group. With these decisions made, the breeder is ready for the active season to begin.

When the breeding colonies are sufficiently strong to produce drones, drone combs are placed in enough drone breeding colonies to produce mates for the first group of virgins to be inseminated. The drone combs are usually given to the breeders on Monday, and the following Friday they, with the eggs and larvae they contain, are marked and put into feeding colonies. The dates these operations are performed are entered in the proper columns of the Drones section of the form. When the combs are given to the feeding colonies the drone emergence dates are calculated and written in the proper column of the schedule. From the emergence dates, the dates of all the remaining operations, including the dates of insemination, are calculated and are written into the appropriate spaces. The availability of the proper drones is usually the limiting factor in the production of the inseminated queens, and for this reason the schedules of all other operations are based on drone emergence dates. As the scheduled operations are performed the dates are marked by a check. This procedure is repeated for each group of queens. It has been found very helpful also to list the daily work to be done on a blank monthly calendar.

#### Production of Drones

The drone breeding colonies will often, in early spring, fail to rear drones even though the queens lay eggs in the drone combs provided them. This difficulty can be prevented by the use of "feeding" colo-

nies. The feeding colonies are preferably queenless and are made up as follows: The lower body is filled with frames of honey and pollen and an excluder is placed above it. The second body has a frame of honey and pollen next to each side wall and three full frames of sealed or emerging brood arranged to leave four individual spaces for combs of drone larvae (there may be two such bodies). The top body contains the feeder can and usually also two empty combs on each side. All bodies must be well filled with bees. The combs of drone brood remain in the feeder colony until two days before emergence. They are then

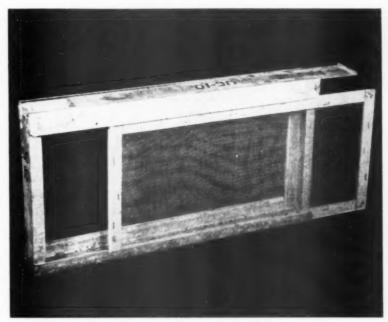
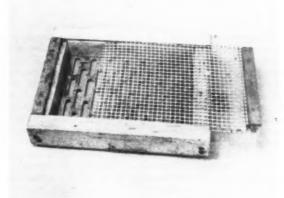


Fig. 2. Cage for combs of drone brood.



Pig. 3. Drone maturing cage.

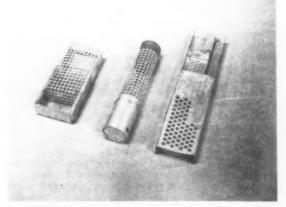


Fig. 4. Left, rectangular nursery cage; center, cylindrical cage of 8-mesh hardware cloth; right, "Ideal" cage for nucleus introduction.

| BREEDING RECORD    |               |              | Nucleus:      |       |  |  |
|--------------------|---------------|--------------|---------------|-------|--|--|
| Mating:            |               | Queen No.:   | Hive:         | Hive: |  |  |
| Emerged:           | Clipped:      | Marked:      | Age Mated:    |       |  |  |
| Insemination:      |               |              |               |       |  |  |
| Levine Tu          | od: Oues      | Mate:        | P             |       |  |  |
| Inbreeding: Queen: | Drone Mother: | Relationship | Bees:         |       |  |  |
| CHARACTER          |               | TTT          | TITITI        |       |  |  |
| COLONY POPULATION  |               |              |               | -     |  |  |
| PROPOLIZING        |               |              | + + + + + + + |       |  |  |
| TEMPER             |               |              | 1             |       |  |  |
| QUIETNESS ON COMBS |               |              |               |       |  |  |
| BROOD: amount      |               |              |               |       |  |  |
| salidness          |               |              |               | -     |  |  |
| reach              |               |              |               |       |  |  |
| gradation          |               |              |               |       |  |  |
| : viobility        |               |              |               |       |  |  |
| rote               |               |              |               |       |  |  |
| crongement         |               |              |               |       |  |  |
| DISEASE: ofb       |               |              |               |       |  |  |
| : •fb              |               |              |               |       |  |  |
| sec                |               |              |               |       |  |  |
| : porelysis        |               |              |               |       |  |  |
| nosamo             |               |              |               |       |  |  |
| 1                  |               |              |               |       |  |  |
| POLLEN ARRANGEMENT |               |              |               |       |  |  |
| INDUSTRY: nector   |               |              |               |       |  |  |
| : pollen           |               |              |               |       |  |  |
| WAX WORKING        |               |              |               |       |  |  |
| ENTER SUPERS       |               |              |               |       |  |  |
| SWARMING           |               |              |               |       |  |  |
| SUPERSEDURE        |               |              |               |       |  |  |
| LONGEVITY: waker   |               |              |               |       |  |  |
| : drone            |               |              |               |       |  |  |
| FLIGHT: time       |               |              |               |       |  |  |
| : temperature      |               |              |               |       |  |  |
| ROBBING TENDENCY   |               |              |               |       |  |  |
| WINTERING          |               |              |               |       |  |  |
| HONEY PRODUCTION   |               |              |               |       |  |  |
| POLLEN PRODUCTION  |               |              |               |       |  |  |
| BR000 + er -       |               |              |               |       |  |  |
| BEES + or -        |               |              |               |       |  |  |
| COMBS + or -       |               |              |               |       |  |  |
| FOUNDATION + or -  |               |              |               |       |  |  |
| HONEY STORES       |               |              |               |       |  |  |
| POLLEN STORES      |               |              |               |       |  |  |
|                    |               |              |               |       |  |  |
|                    |               |              |               |       |  |  |
|                    |               |              |               |       |  |  |

Pig. 5. Individual, 8 x 10, record form.

caged in special comb cages, Fig. 2, which have removable sides, and are placed in either an incubator or into strong colonies for emergence.

On the day of emergence, or one or two days later, the drones are transferred to drone maturing cages, Fig. 3, (fifty drones to a cage). These cages measure 1" x 4 1/8" x 5" and four of them fit into a standard frame. One side is covered with queen excluder and the other with eight-meshes-per-inch hardware cloth which fits into slots so it can be withdrawn. A piece of aluminum tape is fastened to one edge on which the drones' mother's number and the caging dates are written. (It is advisable to cover the writing with Scotch tape because the bees will remove it otherwise). The caged drones are matured in nursery colonies which are preferably queenless and are made up as follows: The lower body is filled with frames of honey and pollen and an excluder is placed above it. The second (and sometimes third) body is provided with a frame of honey and pollen against each side wall and a full frame of sealed brood at the center. A frame of very young larvae is placed in the position of the third frame in from each side. This arrangement leaves four unoccupied spaces into which the caged drones are put with the excluder sides of the cages toward the young larvae. This is important, and it is also important to keep very young larvae next to the cages because the nurse bees which feed the larvae also feed the drones. The hive must, of course, be well filled with bees, and the population of "natural" drones in the colony must be kept low. The top body contains the feeder and four or more frames of sealed brood.

Drones mature as well in cages in nursery colonies as they do when permitted free flight. Several lines of drones can be matured in one colony at the same time and the necessity for marking drones is eliminated. Drones usually survive very well in the cages for fifteen to twenty days after which they may begin to die rapidly.

#### Production of Virgins

The virgins are produced by the usual queen rearing methods with special care being taken to insure proper feeding of the larvae from the time the egg hatches until feeding is completed. The "ripe" cells may be given to nuclei on the tenth day after grafting, and excluders placed over the entrances. Two days later the queens are clipped. They are inseminated when they are about seven days old; a second CO<sub>2</sub> treatment is given the following day, and the queens usually begin to lay two to four days later.

Finding the queens for insemination or CO, treatments can be time consuming, and in 1952 many of the queens were emerged in the nuclei in Rauchfuss spiral nursery cages. The inseminations and CO, treatments were given before the queens were released among the bees. This procedure saved considerable time and also prevented much of the pre-insemination loss of queens which had been experienced previously. It was necessary to destroy queen cells, however, in many of the nuclei before the queens were inseminated or released. During the 1953 season a number of virgins which had been emerged in rectangular nursery cages, Fig. 4, in a nursery colony, and which ranged in age from four to fifteen days, were introduced to established nuclei by means of "Ideal" cages, Fig. 4. with a loss of approximately 20%. Subsequently, seven queens were emerged in the rectangular cages in a nursery colony and were inseminated and given one or two further CO, treatments. and then returned to the nursery for several more days after which they were introduced to established nuclei by the Ideal cage with a loss of one queen. (Three other queens treated as above were introduced by Ideal cages to nuclei made up the day before and all three were accepted and laid promptly). It appears from this that it is possible and practical to introduce inseminated queens to the colonies after all insemination operations have been completed.

#### Care of inseminated queens

In experiments performed in 1952, which will be reported elsewhere, it

was found that a single injection of 5 cubic millimeters of semen produced an average insemination comparable to two injections of 2.5 cubic millimeters each. Consequently, all queens inseminated in 1953 received one injection of 5 cubic millimeters of semen. When the spermathecae of discarded queens, which were inseminated in 1953, were examined it was found that queens which had been emerged in cages in the nuclei had fewer sperm in the spermathecae, as a rule, than those which had emerged free among the bees. It was also observed that queens emerged in rectangular nursery cages in nursery colonies and left in these cages until the insemination and CO, treatments were completed, usually had fewer sperm than queens emerged in spiral cages in nursery colonies and left in spiral cages until the treatments were completed. These observations, and other observations and experiments to be reported at a later date, indicate that queens must be kept at a high temperature during the time the sperm are migrating to the spermatheca. (There is also evidence which suggests that queens need the bees' care during this time). The rectangular cages did not afford the proper clustering space for the bees and the newly inseminated queens thus were probably not as warm as those in spiral cages in the nursery colonies. Likewise the exposed surfaces of spiral cages suspended between combs in the nuclei were considerably reduced by the cages being pressed into the comb on either side and the bees were unable to cluster around the cage as they did in the nursery colonies.

The spiral cages have one serious fault which has caused the writer to discontinue their use. The bees are able to insert their heads between the coils and they sometimes chew the tarsi off one or more of the queens' legs. This happened both in nuclei and in the nursery colonies but more frequently in the nursery colonies. This difficulty was overcome, and the advantages of the spiral cage retained, by the design of a cylindrical cage made of 8-meshes-per-inch hardware cloth. Fig. 4.

With the procedure now followed at the University of California the queens are emerged in rectangular nursery cages in nursery colonies. After they are inseminated and clipped they are transferred to cylindrical cages and returned to the

nursery. They are then given two further CO, treatments on succeeding days. Following that they remain in the nursery for three days, and may be stored in this way for a period which is yet undetermined. They are introduced to colonies by means of Ideal cages. It is preferable to make up new colonies rather than introduce the queens to established ones, but if the queens are introduced to established colonies it is sometimes advisable to feed the colony with a light spray of sugar sirup over the bees and combs, or by other means.

#### Colony descriptions

Regardless of how the bee breeder tests his stock and interprets his observations he must devise some method of describing the colonies and of keeping the descriptions in permanent form. The writer uses a permanent 8" by 10" individual record form, Fig. 5, which when folded at the middle will fit into a 5" by 8" file drawer. There is a section at the top of the form for recording identifying numbers and data which

do not fluctuate. The rest of the face of the form consists of a list of "characters" (and manipulations) and a series of blank columns in which data are recorded. blank column is headed by a space for the date the data were taken. Where appropriate, the characters are rated 1 to 5 with 5 being the best and 1 the worst. Some characters are recorded in other terms, for instance, colony population is given as frames of bees, and honey production as pounds of honey produced. Only selected observations are made at any one date, and some characters are rated only rarely. things as industry must be estimated at the end of the season. At the close of the season totals and averages, where appropriate, can be calculated. The back of the form is blank and the pedigree and any notes are recorded there. A work sheet based on the breeding record form is taken to the apiary and the data are later transferred to the permanent records which always remain in the office.

# FUMIDIL - B For the Prevention of Nosema in Package Bees

Fumidil-B is Abbott's trade name for bicyclohexylammonium fumagillin, a soluble salt of an antibiotic produced by fermentation of Aspergillus fumigatus. This antibiotic has been found to possess a high specific activity against the protozoan Nosema apis, the cause of Nosema disease in honey bees. The antibiotic prevents the reproductive stages of the parasite from attacking the epithelial cells of the digestive stomach of the bee. Fumidil-B has no effect on the spores or the resting stage of Nosema apis, and must therefore be made available in the food of bees for three or four weeks.

Nosema is an insidious disease that shortens the life of bees without producing behavior or mortality symptoms easily recognized under field conditions. The infection shortens the lives of bees by about 50 per cent. The presence of Nosema in package bees may be considered a major deterrent to the building of vigorous colonies.

Infected nuclei are not likely to hold up in queen production and may have to be restocked with bees. During the first weeks after introduction into an infected package colony the queen is subject to infection, with abnormal supersedure as the probable serious result.

Package bees used to establish colonies should receive Fumidil-B syrup during the first weeks after introduction. Sound management practices must not be neglected.

#### How Supplied.

Fumidil-B is supplied in bottles representing 9.5 Gm. of fumagillin activity, a quantity sufficient for the preparation of 50 gallons of treated syrup. It is also supplied in bottles representing 172 mg. of fumagillin activity, sufficient for the preparation of a 10-pound pail of syrup.

#### Directions for Use

Colonies to be shaken for package bees should receive approximately 20 pounds of syrup (2 parts sugar, 1 part water) containing Fumidil-B, fed in two or three equal lots, starting one month before shaking. Queen mating nuclei should be fed Fumidil-B syrup continuously as needed. Package bees used to establish colonies should receive 1 gallon of Fumidil-B syrup when they are introduced.

Water is heated almost to boiling and then removed from the heat. Fumidil-B powder is added and stirred in for a few minutes until dissolved. Sugar is then added at once and stirred to give a clear syrup.



# Do You Need A New Cappings Press?

by John W. Holzberlein, Jr.

Sketches showing Drain Pan & Plug Construction Scale of Plug 1/2-1'

Side View of Pan Made of 1º Lumber lined with . 025 Aluminum



Top View of Drain Pan Showing Rock to Permit Drainage of Honory
Rock Made of Hardwood Strips # 1/6, Spaced by Rods & Short Linds of Pipe



op Aug Shewing Socket Bottom Plugs - It Takes
for Spring & Handles One for Each Basket

WE ARE so enthusiastic about the operation of the new capings press which we built last year that we believe other beekeepers might like it, too. While it is not radically different from the Bradshaw idea now in use in so many honey houses, yet it has at least two features that seem to be real improvements. The first is the use of a hydraulic cylinder instead of a jack for supplying pressure. This makes it both faster and safer. The second is the use of metal baskets to hold the cappings.

The picture will give the general idea, and the drawings and a few more words should fill in the details so that most any beekeeper will be able to build one of the pressing systems.

Ralph Barnes, that ingenious beekeeper from Oakland, Nebraska, made some of the first improvements on the Bradshaw press, and it is to him that I owe thanks for most of these ideas. But I did not exactly like his baskets. They were both heavy and soon became tarnished as they were made of black iron. The baskets we have are made of 2-S aluminum \(\frac{1}{2}\)" thick, which is quite tough. The holes are \(\frac{1}{2}\)" round holes staggered on \(\frac{1}{2}\)" centers with margins of 1" left on the butting edges of the cylinders, and 1\(\frac{1}{2}\)"

on the top and bottom. They are made from sheets 24" x 70" and when rolled, form a cylinder 22" in diameter. They were made for us by the Standard Stamping and Perforating Co., 3131 W. 49th Pl., Chicago 32, Illinois. The cost was \$85.00 for three. We put the hinges and handles on here at Meeker. These baskets could have been made of stainless steel at an additional cost of bout 50%, however the aluminum seems to be entirely satisfactory.

The hydraulic cylinder and all the equipment that goes with it came from Palley Supply Co., 2263 Vernon St., Los Angeles 58, California. We merely asked them to duplicate Barnes' order, and they sent us just about everything we needed to set up the pressure system. The cost was about \$60.00. All, or most all, of these parts are war surplus. The cylinder is the wheel lift from a bomber. It has a travel of 18" which is just enough to press a 4" cake right down to the last without any blocking. We do not know what the capacity is in pounds pressure, but it is plenty. It will force the wax out of the holes like spaghetti if too much pressure is applied at one time.

The spring shown is an important part as it enables the pressure to be applied more continuously and have a certain amount of "follow-up." Ours is off a railroad passenger car. It is stronger than needed. It now seems that one of the front springs from a heavy automobile, like a Cadillac or Lincoln would be heavy enough. The spring should be securely socketed in the plate that goes on top of the cappings to insure its remaining in place when under pressure. We use a plate of 14" steel on top of the wooden plug that goes on top of the cappings as shown in the drawings. To this we have welded a large pipe collar that just fits the outside diameter of the spring. This keeps it securely in the center of the top plate. The end of the hydraulic plunger has a metal end that we had built to fit inside and on top of the spring. This guides the plunger and further secures the spring.

There is a slotted wooden plug that fits into each cylinder and acts as the bottom of the basket. Like the top they are made of crisscrossed 1" wooden strips nailed together and sawed to a 22" circle to fit neatly into the cylinder. There have to be as many of these as you

use baskets, but of course only one top plug is needed.

The pan in which the baskets set is of .025 aluminum backed up by wood. It must be set on a slope so as to drain readily as the honey leaves the cappings. Ours drains into the main settling tank that is in the room directly below the extracting room. As shown in the drawing our pan is 7' long allowing a little slack between three baskets. Three baskets will take care of a lot of cappings, all that anyone is apt to get from a day's extracting. Unless your outfit is set up to extract more than 100 60-pound cans of heavily capped honey they are all you are apt to need. For a run of 60-70 cans we usually use only two baskets. It is better not to load the baskets too full of cappings, however, as one cannot get the most efficiency from the press if the finished cake of cappings is over 6" thick. And a 4" cake will be drier than a 6" cake. At best the finished cake will be about half honey by weight. From tests made this seems

to be about as good as can be expected from any type of equipment. We have used two different cappings driers, and while their capacity was considerably less than the press, half the weight of the dried cappings was still honey.

As shown in the picture we are using a hand hydraulic pump that came with the equipment from Palley's. An automatic electric pump, controlled by a pressure switch would be ideal. It would provide continuous pressure at whatever it was set and this could be stepped up as the cappings cake became dry. This way one would get the last possible drop of honey from the cake without having to watch it and keep continually pumping it. It is a bit inconvenient to have to go back several times in the evening and apply more pressure to get the last cake dry, but that is what one has to do with a hand pump. We intend to install this automatic equipment before another extracting season begins.

Colorado

#### Jack Deyell Celebrates 20th Anniversary

Mossom John Deyell, known to his many friends as "Jack," marks his twentieth anniversary as editor with the April, 1954 issue of Gleanings in Bee Culture. At that time he will have been responsible for the publication of 240 issues of Gleanings.

After attending Oberlin College in Ohio, where he specialized in languages, he started to work for the A. I. Root Co. in 1911. He was employed as an assistant in the New York and Chicago branches of that firm, and later came to Medina where he worked in the packing room, retail store, assembly dept., and later as a salesman of "Airline Honey."

After working in the apiaries four years, he took a leave of absence to take up commercial beekeeping in Michigan. In 1919 he returned to Medina, to become foreman of the apiaries, which at one time numbered nearly 1500 colonies. He passed this job on to Walter Thomas in 1946.

Jack Deyell's long association with Gleanings began in 1929 when he became circulation and business manager. Upon the sudden death of George Demuth in March, 1934, Mr. Deyell was promoted to Editor.



Jack not only has a wide beekeeping experience but also comes from an enthusiastic beekeeping family. A half brother, Huber Burke, operates 500 colonies near Omemee, (near Petersborough), Ontario, and in the same area another 500 colonies are managed by a brother-inlaw, Elmer Skuce.

Sso--! . . .

Other folks have to have money. Beekeepers can get along without it. Ray Presnell, North Carolina

French Prices . . .

The Central Society of Apiculture of France has recommended for the 1953 crop of honey a price of 450 francs per kilo (about 53 cents a pound).

J. M. Belesle, Manville, R. I.

I want to do away with two hives of bees. If I use cyanogas will it affect the honey?

Here are two suggestions: Why not remove the honey before gassing the bees? That would be the simplest thing to do. Then you run no chance of contaminating the honey with the cyanogas. The second suggestion: Why gas the bees? Why not unite them with another colony? That can be done by the newspaper method. Of course, the queen will have to be killed in the colony that is to be united. Place a single sheet of newspaper over one colony, punch a few holes in the paper with a pencil. Place the other colony on top of the newspaper and close up. The bees will chew through the paper and unité. Later the top body can be removed if desired or left on for a top brood chamber. Be sure that one of the queens is removed before uniting or they will fight.

#### J. P. Zollinger, Kingston, N. Y.

Last summer I put a queen excluder between an MD brood chamber and two supers. When I wanted to extract my first honey the supers were full of brood. Now I should like to get the colony back into the brood chamber. What is the best procedure?

On examining your colony this spring, you may find that the queen has gone back down into the bottom, that is if you removed the queen excluder. If she has not gone back down, reverse the two hive bodies. put the upper one on the bottom. and the lower one on the top. Or the queen can be picked up very carefully by the wings, and put in the lower hive body.

This can be done when the weather warms up. If the hive bodies are reversed, you can do this as soon as the weather will permit you to work with the bees. If the queen is moved down, and the brood is left in the top hive body, you should wait until the weather has become settled, and no more cold weather is expected. Then the brood will not become chilled, for the bees may neglect the brood to follow the queen downstairs.

# You Asked Mandatory Price Support for Honey le Needed for Honey Is Needed

by Henry Schaefer

President, American Beekeeping Federation

HE bee and honey industry is faced with a serious situation because President Eisenhower, in his message to Congress, recommended that honey and tung nuts be discontinued from a mandatory price support basis and placed on a permissive basis. Industry representatives who interviewed Secretary of Agriculture Benson, following the Baltimore convention, share this concern.

The recommendations for the 1954 honey price stabilization program which were unanimously adopted by all groups assembled at Baltimore are as follows:

- 1. That in any new act of Congress on support prices for agricultural commodities, honey be continued on a mandatory basis.
- 2. That in conformity with the administration policy of getting away from high rigid supports, honey be supported on the basis of 75 per cent of parity, but not less than the same dollar-and-cent level in effect now, and on a loan and purchase-agreement basis.
- 3. That further in conformity with administration policy of flexibility in supports, and because of its demonstrated efficacy to remove large quantities of honey from our markets quickly and cheaply, an export subsidy on honey be restored at a reduced rate of 3 cents per pound, based on today's level of prices in the world market, but that such subsidy be decided upon only after crop estimates show a surplus is in the making, namely sometime between July 1 and July 15 in any given year.
- 4. That further in conformity with administration policy for the creating of new markets with new products, the diversion subsidy for honey be continued for at least one more year at the present level of 4 cents per pound.

The above recommendations constitute a minimum program of support for the American beekeeper and can be carried on by the Government at a very low cost, but will guarantee the producer against the possibility of ruinously low prices and at the same time assure our country of an abundance of honey bees throughout the nation for the fulfillment of the highly essential function of pollination.

The aid given to the bee and honey industry during the past 2 years by the U.S. Department of Agriculture in leading and assisting in the honey promotion campaign for October is acknowledged with sincere gratitude. This enabled the industry to learn the technique for putting on a successful nationwide promotion in which all organizations collaborated, and in which the grocery trade cheerfully participated, resulting in marked increase in the domestic consumption of honey.

The Federation and the packers believe that the acceptance by the food trades of such a honey promotion campaign is due primarily to sponsorship by the U.S. Department of Agriculture, and therefore earnestly commend the continued cooperation of the Department in this activity, and recommend a similar campaign for October, 1954.

The present price support program for honey has resulted in a firm market for honey. It has been a beneficial thing for both honey producers and packers of honey. Nor has it been a burden to the Government and consequently to taxpayers of the nation.

It now becomes apparent that there is strong opposition to honey being continued on a mandatory basis, although real assurance has been given that price support for honey will be continued on a permissive basis. Once support for honey is placed on a permissive basis, we will never know from year to year where we stand, particularly in case of changes in administration

or Government personnel. In so many words, we are faced with the possibility of losing our honey price stabilization program under a permissive arrangement.

Your help is needed to acquaint your Senators and Congressmen that we need a mandatory price support program if we are to keep our orderly honey market—if we are to be assured an equitable price for the honey we produce. Write your representatives in Washington that to keep bees pollinating more than fifty food and seed crops, we need mandatory support, because beekeepers generally are paid for the pollination services of their bees by the honey they sell.

Congress granted mandatory price support to the beekeeping industry because they recognized that honey bees, through pollination, were necessary to our agricultural economy. The industry sought this legislation only because Mr. Brannon, then Secretary of Agriculture, refused to grant price support for honey on a permissive basis when he had the legal right to do so. That condition can exist again.

A new Agricultural Act is in the making. Hearings currently are being held on this matter in Washington by the Agricultural Committees of the House and the Senate. The industry has requested a hearing before both of these committees. It is expected that these hearings will take place early in March.

It is imperative that you write now to your Senators and Congressmen to support and to vote for MANDATORY price support for honey. If ever action on the part of beekeepers is needed, it is now!

#### 1953 Honey and Beeswax Production . . .

According to the annual report issued by the Crop Reporting Board, Agricultural Marketing Service (formerly Bureau of Agricultural Economics), U. S. Department of Agriculture, honey production in 1953 totaled 224,126,000 pounds, 18 per cent less than in 1952 and the smallest crop since 1948. Beeswax production totaled 4,093,000 pounds compared with 4,825,000 pounds in 1952, a decrease of 15 per cent. The 1953 crop was produced by 5,533,000 colonies, slightly more than in 1952.

Compared with 1952, honey production was down in all regions of the country. Of the principal producing states, only Ohio and Florida are mentioned as having crops greater than in 1952. Beeswax production also was reduced as a consequence.

The leading honey producing states in order of size of crop were California, Minnesota, Florida, Wisconsin, Iowa, Texas, New York, Ohio, Michigan, Idaho, Arizona, Indiana and Colorado. These 13 states produced about 68 per cent of the total crop. It is of interest that California was the No. 1 honey-producing state in spite of the fact that its crop was less than half of its record 1952 crop.

Estimated stocks on hand for sale by producers in mid-December amounted to 53,408,000 pounds—24 per cent of the 1953 crop. Stocks of hon y include 2,115,239 pounds under the Government farm storage loans and 184,401 pounds under purchase agreement. This compares with estimated stocks on hand in 1952 totaling 77,299,000 pounds—38.7 per cent of the 1952 crop, which included 7,021,681 under farm storage loans and 2,981,839 pounds under purchase agreement.

The short crop apparently has resulted in much less honey going under Government loans and purchase agreements, in the canceling of the export subsidy program in mid-year when some 25,000,000 pounds had been approved for export, and probably will result in the 1953 crop being sold before the 1954 crop goes to market.

The average price received by beekeepers for all honey sold in 1953 was 16.6 cents per pound, including the combined wholesale and retail sales of extracted, chunk and comb honey. This was about 2 per cent higher than the combined average price of 16.2 cents in 1952. Extracted honey in wholesale lots brought an average price of 12.9 cents per pound, compared with 12.6 cents in 1952. Retail prices for extracted honey averaged 21.9 cents in 1953, 0.6 cent more than in 1952. Prices received for chunk honey averaged 25.3 cents and for comb honey 30.2 cents in 1953, up 0.5 and 0.2 cent, respectively, from 1952. Beeswax prices declined from 43.1 cents per pound in 1952 to 41.0 cents in 1953, as demand was somewhat less than a year earlier.

# You Asked for It...

W. A. Kerr, Douds, Iowa

Please explain the use of terramycin for disease control.

Terramycin has been used not only for European foulbrood, but it has also proved to be a good preventative for American foulbrood. Sulfathiazole is a very inexpensive control for the prevention of American foulbrood when fed to colonies in late fall and early spring or at both times previous to the brood rearing and also following. It is a fairly stable substance and so remains effective when stored in the combs with sirup or honey.

On the other hand, terramycin breaks up rather rapidly and so is only good for a few days and must get into brood areas at once so that it cannot be used in the same way as sulfathiazole. In using terramycin in the control of both diseases, it should be fed as early as possible in the spring when brood rearing is well under way at the rate of 1 level teaspoonful of terramycin either dusted on the combs or in at the entrance and up among the combs or in feed. In about three weeks do the same thing again. This is expensive compared to sulfathiazole, which can be applied as a preventative for about a cent a feeding while the terramycin will cost about 5 or 6 cents each time you use it. Of course, it has the happy advantage of being a preventative for both European and American foulbrood.

> Dale R. Coman, M.D., Pennsylvania

If bees can gnaw through a newspaper, why are they unable to cope with the delicate skin of a grape?

When bees are imprisoned, they will employ any means of escape, but when free to travel at will, they do not go to the extent of trying to gnaw the skin of fruit. Fruit juice is not natural nectar, and bees, like men, take the easiest route. Instead of tearing fruit open, they look for blossoms that secrete nectar. Sometimes birds break the skin of fruit and if the bees have no blossoms to work on, they may work on the fruit after the birds have pierced the skin,



# Honey Promotion Gets Rolling in California

by Ray R. Reed

Ray R. Reed was born in Pasadena, California, in 1904. His father, Stephen J. Reed, began his beekeeping business in 1890, and Mr. Reed has also been a beekeeper all of his life, outside of eight years in the building trade business. He now operates 2,000 bee colonies, both in the production of honey and in pollination.

For the past two years he has taken active part in the California Honey Advisory Board in the capacity of Chairman. He is also a recently elected Director of the Sioux Honey Association.

WE'VE taken the first step in achieving what long has been the goal of every honey producer and packer in California: to return honey to the housewife's shopping list and reinstate it as a staple item in California homes.

As a result of increased bee colonies during World War II, which aided some 50 important agricultural crops through bee pollination, California was producing 25 million pounds of honey annually . . . 10% of the nation's total and about twice as much as the people of the state were consuming. The need for bee pollination of such big crops as citrus, alfalfa and cotton continued, but the danger of exceeding current consumer demand and resultant lower honey prices became serious.

There were two possible answers. Beekeepers could continue to rely on tax-paid government subsidy . . . or the industry could attempt to increase honey consumption.

A start was made in 1950 when honey producers and packers from all over the state got together and decided to try to stimulate greater use of honey in California, Through the provisions of the California Marketing Act of 1937, and under authority of the State Department of Agriculture, the honey industry set up the California Honey Advisory The operations of this board, which is composed of producers and handlers, are financed from assessments levied by the state on both producers and packers. A manager, Kermit Wilson, was employed during the latter part of 1952, and a three-pronged program . . . research, advertising and publicity, was launched.

An appropriation was made to the University of California at Davis for research on the diastase content and other properties of honey. cent trend in some European nations to attempt to bar U.S. honey, because of its alleged low diastatic content, threatens to impair the export trade. Under the supervision of Dr. J. E. Eckert a graduate student, John E. Schade, is now conducting the research. In addition to protecting the export trade, the Board feels that this research will turn up new facts that can be used in future advertising and market develop-

In the fall of 1953 a promotion campaign was conducted by the Through its advertising agency, Mogge-Privett, Inc., the campaign was centered around National Honey Week . . . the last week in October. The theme selected was "Eat honey more often." The fact that honey is a quick energy food was dramatized by the use of the name and personal endorsement of Elroy "Crazy Legs" Hirsch, former All-American football player at both Wisconsin and Michigan, and ace end of the Los Angeles Rams. Honey is served regularly at the Rams' training table in the spring and at the Hirsch home. Mr. Hirsch even decided to try eating honey between halves of the Rams' games. A number of other accomplished athletes have attributed success to honey as a supplier of quick energy.

Two newspaper ads ran two weeks apart in 50 California newspapers. Commercials were placed on both radio and television stations in San Francisco and Los Angeles, which resulted in special "Honey Week" interviews of beekeepers and their wives.

Before the campaign broke, the Advisory Board appealed to the California Chain Stores Association and the Southern California Retail Grocers Association for support. Representatives of such chains as Safeway Stores, and Van de Kamp's Bakeries, at a luncheon meeting in Los Angeles, expressed their desire of "business men helping agriculture." The excellent press coverage of this meeting (the five large dailies of Los Angeles and seven papers in the surrounding area). demonstrated the public interest in this type of cooperation. Bulletins both the Chain Store were sent and Retail Grocers' Associations to all member chains throughout the

In the field of publicity, the Board contracted with California Foods Research Institute of San Francisco for the preparation of a recipe a week, together with stories of each and four exclusive photographs during the year, to be released to the newspapers in California. The Board also has a contract with National Honey Institute for national publicity. Many mentions of honey were found in newspapers and magazines as a result of California Funds Research Institute's services. An especially good one appeared in the Los Angeles Times' Sunday Home Magazine section on November 29, 1953. A full-page color photograph of a Blond Honey Fruitcake, together with the recipe and details for preparation on the opposite page, was given special emphasis during the Holiday season.

Kick-off luncheons for Honey Week were held in San Francisco and Los Angeles, to which were invited leading newspaper, radio and television food economists. As a result of the personal contacts, much free publicity was given the honey industry.

Individual packers in the various markets detailed the stores in which their product was stocked, and honey producers visited their neighborhood stores to arrange for special displays.

Due to extra space and time from newspapers, radio and television stations, and trade magazines, the impact of the campaign was materially increased. Every dollar spent by the Advisory Board in consumer advertising achieved nearly two dollars worth of consumer impressions.

As to the question of whether or not more honey has been sold as a result of this campaign, it is still too early to determine. But the first step has been taken . . . that of mobilizing the California honey industry itself to meet the challenge presented by lagging consumer use, the future threat on the export trade, and to create orderly and stable marketing of honey in the state of California.

California

#### Red Cross . . .

In March millions of citizens open their hearts and purses to support the American Red Cross. When you join the Red Cross you identify yourself with each act of mercy this great organization performs. helped in Illinois when tornadoes killed or injured 136 persons and 4.449 buildings were destroyed in 31 disasters in 10 counties where you spent \$74,413 to help. In Illinois you helped train 45,245 persons in first aid, 67,937 in swimming and life saving, and 18,096 in home nursing. You spent \$357,417 to help 62,175 servicemen or veterans in Illinois. You helped train 1.104,417 youngsters through the Junior Red Cross. The helping hand of Red Cross collected 4,121,200 pints of blood last year. During the fiscal year there were 100 Red Cross volunteers to every paid worker.

This year's goal is \$85,000,000 and 30,000,000 members. In your hands is the measure of what the Red Cross can do in the year ahead.

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Frank E. McLaughlin, Questions and Answers Editor

# For the Beginner

The beekeeper who owns a colony or two of bees, but still classes himself as a beginner, should inspect his bees as early in the spring as possible for food, and for condition of the bee colony in general. Do this on a warm sunny day, when the temperature permits the bees to fly some. Don't keep the hive open too long. Be quick about your inspection. If the bees are low on honey, sugar syrup can be fed early in the spring, by putting the syrup in a friction top pail, with several small holes in the lid of the pail, and turning the pail upside down over the hole in the inner cover. Place an empty super over the pail, and replace the hive cover. Old burlap or similar material should be packed around the pail in the empty super.

Hives in which bees have died in winter should definitely be taken from the bee yard. They could have died from disease. If the beginner does not know disease when he sees it, have some experienced beekeeper examine the combs for disease. If the dead colony is left in the bee yard, the other bees in the yard will rob out what honey is left in the dead colony, on warm days, and if the colony did die of disease, it will be

spread to the other colonies.

If robbing starts when a hive of bees is being inspected, as so often happens in the spring, close the hive immediately.

The beginner who does not have bees yet, but has his packages ordered, can hide his time by getting his equipment in shape to hive those packages when they arrive, and by reading good books and magazines in his spare time. This also applies to beekeepers who are not beginners. If there are established beekeepers near, visit them. You will find beekeepers always ready to talk bees, and a lot can be learned from those talks. If there is a beekeepers' association in your locality, visit the meetings and don't be too timid to ask questions. Actual experience is the best teacher, but all that can be learned from reading and visiting is very helpful when the busy season of working the bees arrives. Get all knowledge possible of activities and habits of bees. Of course you will make mistakes, everyone does. People who have taken care of bees for many years make mistakes. Try to remember what you did wrong. and refrain from making the same mistake over again.

# Here and There

#### New York

#### Dr. Dyce Honored

In the Ithaca Journal, Jan. 12, is the announcement of well deserved honor accorded to Dr. E. J. Dyce.



"Dr. E. J. Dyce, professor of apiculture at Cornell, has been elected to honorary membership in the Bee Research Association of Great Britain. He is the second scientist in America to receive this honor for research in apiculture.

The Bee Research Association edits the magazine, Bee World, which publishes abstracts in English of all the important scientific work carried on in beekeeping in the major honey-producing countries of the world. It also sponsors the National Beekeeping Museum which is housed in the Museum of English Rural Life at Reading, England."

#### Southern Tier Beekeepers, Binghamton

The following officers were elected November 17, at the regular meeting of the Southern Tier Beekeepers Association: President, Rubin Rood, 14 Decatur Street, Binghamton, N. Y.; vice president, A. E. Bolster, 6 Franklin Avenue, Hillcrest, N. Y.; secretary and treasurer, H. B. Webb, Box 18, Port Crane, N. Y.

#### Spray Poisoning

Wilbur C, Wahl, Clayton, N. Y., reported at the Toronto Convention the loss of about 800 colonies out of 2000 by the use of 6% DDT spray in oil, air applied, used against tent caterpillars. Certainly a serious proposition for an individual beekeeper.

What can be done about it? It is admitted that tent caterpillars are dangerous to tree areas. They must be controlled in some way. On the other hand the use of control materials without regard to the damage which can be caused to farming (including beekeeping) is an unwise plan.

The indiscriminate use of spray for various purposes may even be thought of as mass murder. Examination of 25 random people for traces of DDT from the general use of this material resulted in 23 of the 25 showing definite accumulation of the material.

Any losses due to necessary application which results in damage certainly should be accompanied by an appropriate payment to compensate for the damage.

#### Minnesota

#### New Officers

New officers elected at the annual meeting on December 5 are Paul Johnson, Callaway, president; Herman Ellingson, Odessa, vice president; Robert Banker, Cannon Falls, secretary-treasurer and delegate to Federation.

Robert Banker, Sec.-Treas. Cannon Falls, Minnesota

#### Arkansas

#### Leaflet 177—Crop Pollination in Arkansas

This is the title of a leaflet from the Extension Service of the University prepared by Gordon Barnes, Extension Entomologist, Earl J. Allen, Extension Horticulturist and W. H. Freyaldenhoven, Extension Agronomist, covering the pollination of legumes and clovers and other field crops, fruits and vegetables. Copies are available from the Extension Service of the University of Arkansas, Fayetteville, Arkansas.

#### George W. Freeman State Inspector of Apiaries

The new state inspector of apiaries, George W. Freeman of Ozark, is on the job. He succeeds the late



J. H. Davis, who was killed last year in an automobile accident. Freeman is a former state senator and a beekeeper. He spent a number of years with the Soil Conservation Service, where he got a background in bee pollination, an important new frontier in the bee business.

Headquarters—Little Rock
47 years of age
Beekeeper for more than 25 years
Graduate Syracuse University
Professional forester

14 years with USDA Soil Conservation Service

During his tenure of office as State Senator in practical ways proved himself to be a real friend to Arkansas beekeepers. Since that time has continued to demonstrate his interest in the promotion of the beekeeping industry.

Military record: Volunteer

World War II — Served 1942-1946. Served with the First Army as an artillery officer in England, France, Belgium, Holland and Germany.

Korea—19 months service beginning August, 1950—Battalion commander, 937th Field Artillery.

#### First Prize to North Arkansas Association

The North Arkansas Association won first prize at the Newton County Fair in Jasper. The association appointed a committee, with the help of Deputy Inspector Ray Langston, to put in a booth with a nice display of honey and pollination products also beekeeping supplies with literature to be handed out at the Newton County Fair. C. O. Norton, Carolyn Sue Waters, Paul Lee Robinson, Clayton Kelly, and Mrs. C. H. Rice were the five lucky names in the drawing contest. Honey was donated by Arthur Mc-Kay, W. H. Smith and Ray Langston. The booth received the blue ribbon and \$10.00 for the display.

The Association has the objective of promoting better fellowship among beekeepers and the learning of better beekeeping methods and the protection of the interests of all beekeepers in North Arkansas, helping with disease control, keeping Arkansas green with a good pollination program and learning the many ways of using honey. This Association cooperates with the Arkansas State Association.

> Gladys McKay Valley Springs, Arkansas

#### Colorada

#### Spaulding is New State Apiary Inspector

Glenn Spaulding is Colorado's new apiary inspector. Glenn was born April 15, 1916. After graduating from Sunny Slope High School, Washington, he studied entomology at Washington State College at Pullman, Wash. He obtained a B.S. in entomology from Washington State College in 1939, and later received a Masters degree in wool technology from the University of Wyoming at Laramie.

From 1946 to 1949 Glenn was employed by the Federal Wool Laboratory, PMA, USDA; from 1949 to 1951 he worked on the Sheep Breeding Program at Fort Wingate, New Mexico; and from 1951 until 1954 he was working for the U.S. Wool Testing Laboratory.

#### Hillary to be on KLZ-TV March 1

Edmund P. Hillary, the world famous conqueror of Mount Everest, will be on KLS-TV, Denver, March 1 around noon. Hillary is a large commercial beekeeper in New Zealand. Governor Thornton and Commission-

er Swisher will also appear on the program. This program was arranged by Otto Pfretzschner, manager of CHAC.

#### Toma

"Let's Go Visiting"



John Jessup, Perry, and H. Wayne Bice. Woodward, were guests on "Let's Go Visiting" farm interview program over Station WHO, Des Moines, Thursday, January 14. The interview was conducted by Med Maxwell, "America's most traveled farm radio man." This is a program of Allied Mills, Inc., Fort Wayne, Indiana.

#### Montona

#### New President

At the State Bee Meeting in Billings, the first of December, Harry J. Rodenberg, Jr. of Wolf Point, Montana was elected president for 1954. In the consideration of new business, the subject of publicity came up. The plan is to have a display of honey and give the hotel wherever the annual meeting is held enough honey to keep on all tables and counters during the meeting. The committee plans to secure a good honey server that is not messy.

#### Kentucky

Field Representatives of **Kentucky State Association** 

District 2

Mr. Amos Jones

Box 15, Nolin, Ky.

District 3-

Mr. L. G. Pile

Rt. 1, Box 123

West Point, Ky. District 7-

Mr. Arthur L. Chapman

Utica, Ky.

District 9

Mr. Fonce Gipson

Auburn, Ky.

District 15-

Mr. J. D. Lane

R.R. 4. Erlanger, Kv. Dixie 7821

Mr. M. C. Northcutt

110 Highland Ave.

Ft. Mitchell, Kv.

District 20

Mr. Otis K. Wolfe

Friday's Radio Service, Phone 799

Court Street

Harlan, Ky.

#### Kansos

#### Crawford County Association

The Crawford County Association, meeting at Girard, Kansas, December 13. elected R. S. Snare. Cherokee. president; Marion Potter of Girard, vice president; Herman Kaemmerling of Girard, secretary-treasurer. Mrs. Vail Flint volunteered to be publicity leader.

#### Nosema Disease in Kansas

According to 33 questionnaires, sent out by Dr. R. L. Parker, to cover the period from 1928 to 1953, Nosema disease was noticed in 1928. 1931, 1945, 1946, 1947, 1948, 1951, 1952, and 1953, according to eleven reporters, with a percentage loss of adult bees estimated as 10 in 1945; 25 in 1952; 30-50 in 1945, 1946, 1947, 1948, and 1951. One reported 60 per cent loss of adults in 1953; two reported 75 per cent in 1952; and one, 75 per cent in 1928. Losses in honey were variously estimated by a few reporters as between 75 and 100 per cent. Many of the reporters buy both packages and queens from southern states.

#### Apiary Inspection Summary

In the 1953 inspection work, 912 apiaries were inspected, with 7147 colonies. American foulbrood 362, of which 328 were destroyed and 34 transferred. Only 12 cases of European were found. Still 404 box hives in the figures. Average cost of inspection per apiary \$4.60; per colony 59c; 46 beekeepers reimbursed for property loss.

#### Wisconsin

The "Badger Bee" reports a very lively and successful convention, the 76th Annual of the Wisconsin State Beekeepers Association. One of the events of the Convention is a Honey Show with prizes for honey displays.

The association voted to affiliate with the American Beekeeping Federation, and the Wisconsin Federated Beekeepers passed out of existence. It is now possible to join organizations from the county level all the way up to the national in one act. Federation membership is still optional but, to join, a minimum dollar or 4 cents per colony dues may be paid through the state association channel at the same time the \$2.00 state dues is taken. For example, a beekeeper with 48 colonies pays \$1.25 county dues, \$2.00 state dues, \$1.92 federation dues to his county secretary who sends \$3.92 to Mrs. Brueggeman and she sends \$1.92 to the treasurer of the Federation.

#### "Badger Bee"

This is the Wisconsin Association publication, published each month by the Association with William Judd of Stoughton, president; Vern Howard, Milwaukee, vice president; Harold Richter, Whitehall, 2nd vice president; Mrs. Louise Brueggeman, Menomonee Falls, recording secretary-treasurer; Allan Vosburg, Fort Atkinson, corresponding secretary-editor. Support your state association publication with advertising: one page \$18.00, one-half page \$12.00, one-fourth \$7.20, one inch \$2.00, lower for additional insertions.

#### California

#### In Alemorium

Milton Jay Sain was born in Hanford, California, May 19, 1881. At the age of 12 he started working with a few hives of bees at a time when beekeeping was a very hard and slow business. In my travels over the highways from one side of the San Joaquin Valley to the other, he would tell me of his hard way of moving bees with horse and wagon, with bee nets or hive covers to keep bees in, and taking two days where we only take a few hours to make the same trip. He also spoke of using the portable extractor to take honey off, after leaving the horses a half mile from the location. The going was hard in those days, but Milton lived to see the good days when he could drive good trucks and had one of the best honey houses in the State of California. His last work was on his new truck, making a flatbed and having a leader installed, but he never had a chance to try out the leader.

Milton Sain was a member of the

bee association for 30 years, and the bee inspector for Kings County for 37 years. It seemed his great joy to help a young beekeeper start in the right way, and he was always ready to give assistance when he found one having trouble. His advice has put many a young man on the right track to become a real beekeeper.

Milton Sain left his bee yard about 9 o'clock in the morning of January 17, went in the house feeling sick, and in less than an hour he died. He leaves his wife and sister-in-law to carry on the work. I know we all wish them good luck.

ELLIS A. TAYLOR

#### British Columbia

#### Queen Elizabeth Honors W. H.

Her Majesty, Queen Elizabeth, has honored W. H. Turnbull of Okanagan Landing by conferring a decoration which he may wear to commemorate her coronation; a fitting climax to a long life given to the practice of beekeeping and indicates the contribution made by Mr. Turnbull's work in promoting correct apiary practice.

#### **Five Divisions**

The British Columbia Honey Producers have five divisions, each with an association; Vancouver Island, Fraser Valley, Peace River, Vancouver, and Squamish. Peace River seems to be the latest "find" for honey production—a new country.

#### Polistes

On Vancouver Island a member of the wasp family, believed to be Polistes, has presented a difficult problem. Whole colonies of honey bees were invaded and destroyed. Possible control: (1) keep colonies strong and prosperous; (2) colonies must be queenright; (3) reduce entrance to one inch at first sign of trouble to give the colony a better chance to defend itself.

Several kinds of wasp traps have been tried. The most simple one is a bottle of the pop bottle type, one-third filled with a thin sugar syrup placed near the colonies and emptied of wasps when necessary. The wasps enter the mouth of the bottle and drown in the syrup. If honey bees rob at the bottles, they must be removed.

#### The Panel . . .

(Continued from page 91)

nuclei or queen holding nuclei in all vards. When culled combs are found. they are removed, unless they contain pollen or honey or brood vital to the colony. Such combs are placed at the outside of the brood nest and removed on a succeeding trip. If the combs are not needed by the colony. they are exchanged with a frame of foundation in the honeyflow or drawn combs for one of the nuclei. If the colony needs a boost, he exchanges the culled comb for a comb of sealed brood from the nuclei. If the combs are dry, they are taken right to the honey house to be cut out and full sheets of foundation installed for replacement. At the end of the season, culled combs stored in the nuclei are then discarded. This is good practice. More beekeepers should have queen rearing or queen holding nuclei. They are also a way to make increase when they are wintered above strong colonies and used the succeeding spring.

Weaver operates several thousand mating nuclei and uses a lot of the poor combs in these nuclei. Unless combs are extremely poor one or two can be used in each nuc without harm. He tries to have as many of the poor and in-between combs stacked away to go into the mating nuclei as possible, either empty or full of honey.

Rendering - In cutting out the combs. Stricker uses a butcher knife and a cleaver to cut them out. Kalthoff a hatchet. Usually rendering is done once a year when there is time, including the culled combs, comb scrapings and slumgum from any source like the wax melter. In rendering, pollen obtained may be used with soyflour and sirup in spring stimulative feed. Frames may be tightened, re-nailed, fitted with foundation for the next season. The wax is disposed of as desired. If means of wax rendering are not readily, available, the wax, of course, may be rendered by commercial out-

#### ANOTHER GOOD RULE . . . .

When you find a colony with American Foulbrood, destroy it; then give a preventive sulfa feed to the rest of the yard. Dr. T. A. Gochnauer, Minnesota.

#### --- SHORTS ---

Dr. Edgecombe in Beirut . . . Many will remember Dr. Edgecombe when he was in Iowa and later in Utah, and his work for us in beekeeping and pollination. He is now in the American University of Beirut, Syria. Beirut (formerly Beynouth) is right on the eastern shore of the Mediterranean, south of Turkey. The University has a wonderfully beautiful campus and buildings. "Sam" is Dean of the new School of Agriculture.

Professor Edgecombe has a 250 acre farm at his "disposal. Third year students will spend a whole year of study and work on it and it will be the center of agricultural research and extension activity.

#### American Beekeeping Federation Establishes New National Headquarters

At its recent meeting in Baltimore, Maryland, the Executive Committee acted upon the establishment of a new National headquarters. Because of its mid-continent location, its accessibility and its importance, Chicago was selected.

In addition, an Executive Director was selected. In general his responsibilities will center around:

1. Assisting the Board of Directors and Executive Committee to achieve the goals of the Federation and the Industry.

Relieving industry members or the Executive Committee and officers of the load they have carried in regard to routine work of the Federation.

3. Representing the Federation at regional and state honey industry meetings, and at government and other leader conferences.

The man selected as Executive Director of the Federation is Frank A. Smola. He comes to our industry from the dairy industry and likewise, he comes to us equipped in national trade association work, experienced in administration, and in coordinating local and national industry programs.

The Executive Committee of the Federation suggests that each industry member direct all correspondence with the Federation, inquiries, dues, etc., to:

ues, etc., to:
Frank A. Smola,
Executive Director
American Beekeeping Federation
82 W. Washington
Chicago, Ill.
ROBERT BANKER, Sec'y-Treas.



# CALIFORNIA BEE BREEDERS, Inc.

Member-Owned Over 100,000 Colonies Est. 1933

#### **MEMBERS 1954**

1436 Wescott Rd., Colusa, Calif.

| nerbert lagnt, rresident        | 1450 Wescott Ku., Colusa, Cant.        |
|---------------------------------|--|
| Don J. Strachan, Vice President | Rt. 2, Yuba City, Calif.               |
| M. C. West, Secretary-Treasurer | Rt. 1, Box 279-A, Winters, Calif.      |
| John Alired                     | Rt. 3, Box 950, Madera, Calif.         |
| Bowen and Shuman                | Williams, Calif.                       |
| Thos. C. Burleson               | 924 Oak St., Colusa, Calif.            |
| Dale Colbert                    | Rt. 1, Box 19, Los Molinos, Calif.     |
| Thos. S. Davis                  | 3129 Howe Ave., Sacramento, Calif.     |
| Evans Bros.                     | Box 264, Durham, Calif.                |
| Howard Foster                   | Box 239, Colusa, Calif.                |
| Lloyd Fox                       | Box 492, Fair Oaks, Calif.             |
| Winfield Gear                   | Tehama, Calif.                         |
| C. F. Koehnen and Sons          | Glenn, Calif.                          |
| Lohman Bee Co.                  | Rt. 2, Box 644, Loomis, Calif.         |
| D. D. Martz                     | Rt. 2, Box 845, Vacaville, Calif.      |
| D. E. Meyer                     | Rt. 2, Box 685-B, Oroville, Calif.     |
| I. W. Meyers                    | 15 Parkhill St., Colusa, Calif.        |
| Sam E. Moore                    | Rt. 2, Box 620, Anderson, Calif.       |
| Troy H. Nance                   | 3764 Jeffrey Ave., Sacramento, Calif.  |
| Homer E. Park                   | Palo Cedro, Calif.                     |
| Joe P. Pencin                   | 231 E. St., Davis, Calif.              |
| H. H. Penner                    | Rt. 2, Box 136, Orland, Calif.         |
| Lee Person                      | Rt. 3, Box 372, Chico, Calif.          |
| Lester Rowe                     | Box 136, Colusa, Calif.                |
| E. H. Ryon and Son              | Box 46, Durham, Calif.                 |
| John S. Shackelford             | Rio Oso, Calif.                        |
| Geo. E. Smith                   | Rt. 4, Yuba City, Calif.               |
| G. W. Stiles                    | 530 E. St., Davis, Calif.              |
| Cliff Thomas                    | Cottonwood, Calif.                     |
| Geo. J. Triphon                 | 569 34th St., North Sacramento, Calif. |
| C. S. Wenner                    | Rt. 1, Box 320, Glenn, Calif.          |
| Homer H. Word                   | Rt. 1, Box 380, Gerber, Calif.         |
| J. E. Wing and Son              | Knights Landing, Calif.                |
|                                 |  |

#### QUEENS - QUEENS

FUMAGILLIN — The drug that shows promise of giving you a better queen, less supersedure and more honey. For the second straight year we will offer you queens fed fumagillin for your approval.

## THREE BANDED ITALIANS PACKAGES

| Number        | Queens | Pack       | ages    |
|---------------|--------|------------|---------|
|               | 2-     | lb. w/q 3- | lb. w/q |
| 1-25          | .00    | \$3.20     | \$4.20  |
| 26-99         | .80    | 3.10       | 4.10    |
| 100 or more . | .70    | 3.00       | 4.00    |

#### F. R. SAWYER

Box 574 Bunkie, La.

# Baltimore

#### THE BALTIMORE MEETING

Beekeepers from all sections of the country turned out in numbers to make a success of the Baltimore convention held the last week in January at the Lord Baltimore Hotel. The weatherman cooperated to make it a banner week. The lobby of the hotel left no doubt as to what convention was in session with its huge map of Maryland showing the principal honey plants and flanked by lighted pictures of beekeeping scenes and displays of sparkling honey. On the mezzanine, the Maryland State Honey Show added to the fine display.

The first two days were given over to sessions of the governing bodies of the various associations in the industry: the American Beekeeping Federation, the American Bee Breeders Association, the Apiary Inspectors of America, the Bee Industries Association of Manufacturers, the Honey Packers and Dealers, and the American Honey Institute. Delegates from most of these met in the Honey Industry Council.

#### American Beekeeping Federation

At the annual meeting of this organization, Henry Schaefer of Osseo, Wisconsin was re-elected president, Howard Foster of Bridger, Montana was elected vice president, and Robert Banker of Cannon Falls, Minnesota, secretary-treasurer. Members of the executive committee are S. Joaquin Watkins, Ray Reed, Howard Graf, Leslie Little and Robert Banker. Frank A. Smola, 82 W. Washington, Chicago 2, Illinois, has been retained by ABF as executive director to handle publicity work. His duties will start on March 1. Keynote speech of the meeting was given by Jim Hambleton, Chief of the Bee Culture Laboratory in Washington. Pertinent suggestions for the industry included keeping executives of associations for longer than one or two years, doing away with state embargoes on bees and equipment, and the suggestion that further investigation be made of the possibility of financing beekeepers' organizations and publicity work through collections by manufacturers and honey packers. Further, he recommended publication of an official organ to tie members together. Interesting highlights of the talks which followed were the discussion by George Abrams of Maryland, W. W. Clark of Pennsylvania and W. A. Stephen of North Carolina on extension work; the talks on pollination and insect control by Jim Hambleton, Wilbur Wahl and Clare Floyd; and the general discussion of various phases of the industry from the standpoint of amateurs.

Dr. Paddock of Iowa served as a genial toastmaster for the annual banquet on Thursday night. Entertainment was furnished by the Chesapeake and Ohio male chorus and the showing of the newest film on beekeeping "Bees for Hire" by the Texaco Oil Co.

The final day was given over to reports by officers of the various industry groups and a discussion of marketing by S. J. Watkins, Mrs. Harriett Grace, Marvin Webster, and G. Chester Freeman.

Resolutions of appreciation were made by the organization to the Maryland Association and the hotel for the fine meeting; to the Minnesota Association for the National Honey Show last summer: and to Henry Schaefer and Bob Banker for their work in 1953. Other resolutions included requests to government authorities to reinstitute package and queen reports and interim reports on honey stocks and honey plant conditions, to support the price of honey in 1954 at 75% of parity, to include honey under mandatory support, to give the industry help with the October promotional program again this year, and to classify honey bees as essential to agriculture so that shipments by express would be at regular first-class rate.

#### Bee Industries Association

The following officers were elected at the meeting of BIA: Howard Dankemeyer, president; Baxter Woodman, treasurer; and R. H. Dadant, secretary. Dues were assessed for 1954 on the same basis as last year and it was agreed to continue the ½ of one per cent contribution to the Institute and the Federation. Milton Smith was retained as legal council and Washington representa-

tive for another year. Plans for extending membership to other manufacturers were discussed.

#### Honey Packers and Dealers

The National Honey Packers and Dealers Association voted to collect one cent a can from the price paid the producers and to contribute an additional one cent from their funds to the Honey Industry Council. The contribution will be voluntary. The Council will determine how the money is to be spent.

#### American Honey Institute

A report of the activities of this organization was given by the Director, Mrs. Harriett Grace. Receipts of the Institute were up this year. probably due to the fact that the Canadian Association increased their contribution. This year the Institute made available without charge to Government men who were promoting the October Honey Week limited supplies of streamers and other literature. Free material was also sent to state and local associations. During the meeting, M. J. Devell, R. F. Remer and Woodrow Miller were re-elected to the Board with Remer as chairman. were taken to increase board membership from 9 to 11.

#### Honey Industry Council

This organization was planned at the annual meeting a year ago so that the industry might have one group to speak for all associations in Washington. The first meeting was held in Chicago in April 1953. At Baltimore, three meetings were Members of the council are: Roland Stone, R. B. Willson, Alan Root, R. H. Dadant, Leslie Little. Glen Gibson. John Holzberlein. Woodrow Miller and Henry Schaefer. Member groups will submit to the Council their recommendations on problems of industry-wide importance and the Council will correlate them and attempt to bring them to agreement. Any member group can send its own representatives to Washington. Price support was discussed at the second meeting and a report of results is given elsewhere in this issue of the Journal. At the third meeting officers were reelected as follows: Alan Root, chairman; R. B. Willson, vice-chairman; and Glen Gibson, secretary. A committee consisting of Alan Root, Woodrow Miller, Henry Schaefer, Glen Gibson and possibly others will be in Washington to make contacts this month.

Young mated queens, full weight packages, health certificate, live delivery, satisfaction. We offer two top performing strains: Dadant's Starline, a proven top performer, and our regular light colored Italians.

| Packages | with | Italian | Queens. | F.O.B.: |
|----------|------|---------|---------|---------|
|----------|------|---------|---------|---------|

|        | Italian Q. | 2-lb.  | 3-1b.  | 4-lb.  | Starline Q |
|--------|------------|--------|--------|--------|------------|
| 1-24   | \$1.20     | \$3.25 | \$4.25 | \$5.25 | \$1.50     |
| 25-99  | 1.10       | 3.00   | 4.00   | 5.00   | 1.40       |
| 100-up | 1.00       | 2.75   | 3.75   | 4.75   | 1.30       |



Packages with Starline queens add 25c per package.

#### SUNKIST BEE COMPANY

Convent. La.



#### TWO-OUEEN CONVERTIBLE HIVE

Patent Pending

All beekeepers, in all parts of the world, aim to have large colonies in the Spring of the Year before the main honeyflow starts. The Two-Queen Convertible Hive has been designed and developed to raise large colonies in record-breaking time and to eliminate difficult, costly, unpleasant labor.

asant labor.

1. It gives higher production of honey at lower costs.

2. No other new equipment is necessary, all standard equipment will fit the New Hive.

3. It keeps bees less disturbed—more contented.

4. It promotes better control of bees.

5. It is complete, ready to use, well made.

Write for free circular giving full information. Price without frames \$18.00, delivery charges extra.

#### John J. Maendel

Forest River Colony

Fordville, North Dakota

# ensen's Bees and

All winter we've been busy in our shops, and are prepared as never before to furnish you with the best package bees and queens you can buy, and in any quantity you can use. No order too large or too small for our prompt attention.

Dates are being taken fast, and if you have not placed your order we suggest you do so as early as possible. Spring is with us here now, and we are ready for it in a big way. If you have never used our stock, and if you want the best, you owe it to yourself to "make the change."

Jensen Reared Queens Are Known the World Over.

#### "Magnolia State" Italians

Dadant's "Starline" Hybrids



|          | Queens | 2-lb. Pkgs. W/Qs. | 3-lb. Pkgs. W/Q |
|----------|--------|-------------------|-----------------|
| 1-24     | \$1.25 | \$3.75            | \$4.75          |
| 25-99    | 1.15   | 3.50              | 4.50            |
| 100-999  | 1.05   | 3.25              | 4.25            |
| 1,000-up | 1.00   |                   |                 |



All above prices are for, or with "Magnolia State" Italian Queens. For Queens of Dadant's Improved 4-Way Hybrid "Starline" queens add 25c each.

Hybrid queens are marked and clipped free as a special service. Italians only on special request, Air Mailed to all distant points. Package bees by express collect, small lots by Parcel Post, base postage on 6-lb. and 8-lb. on 2-lb. and 3-lb. packages respectively. We are prepared to load full truck by pre-arrangement.

## JENSEN'S APIARIES

Macon, Miss., U.S.A

We are regular supporters of American Beekeeping Federation and the American Honey Institute.

Advertise in the American Bee Journal



# ET'S GET TOGETHER

food. The exhibit will be open from 10 A. M. to 10 P. M. each day from March 14 through March 20. It will be manned by experienced beekeepers and anyone interested in beekeeping may secure free advice.

John H. Furber, Sec'v

Lake Region Beekeepers Alexandria, Minn., April 6

The Lake Region Beekeepers will hold their spring meeting in Alexandria, Minn., on Thursday evening, April 6.

Glen McCoy, Sec'y

#### Westchester County Beekeepers

New Rochelle, N. Y., March 21

The Westchester County Beekeepers Association will hold its next meeting at 2:30 P. M., Sunday, March 21 at the Odd Fellows Hall, 20 Lockwood Avenue, New Rochelle. At this time there will be a discussion on spring preparation of the hives and the feeding of bees. All those interested in beekeeping are welcome. Refreshments will be served.

Carlton E. Slater, Publicity

#### Illinois State Beekeepers Assoc. Herrin, Ill., July 1954

The summer meeting of the Illinois State Beekeepers Association will be held in Herrin, Illinois during the month of July, 1954. The exact date and a complete program will appear at a later date in this Journal.

We invite all beekeepers to make plans to attend this meeting. Help us make it a success by your attendance. We are compiling an interesting program for your enjoyment.

> H. E. Dale. President Southern Ill. Beekeepers Assoc.

#### Middlesex County Beekeepers Assoc. Waltham, Mass., March 27

Middlesex County Beekeepers Association will hold its next regular meeting at the State of Massachusetts Field Experimental Station in Waltham on March 27 at 6:30 P. M. with a buffet dinner. After a short business meeting, the results of the 125th annual Flower Show of the Massachusetts Horticultural Society "Bee Exhibit" will be reported by John Proctor, Chairman of the Exhibit Committee. The theme of the exhibit is "Honey from the Hive to the Home" and the main part will be given over to the use of honey as

#### International Beekeeping Congress

Copenhagen, August 28-30

Plans for a proposed tour to include attendance at the International Beekeeping Congress in Copenhagen, August 28-30, are progressing well. Through the cooperation of the Universal Travel Service of Raleigh, N. C., Mrs. W. A. Stephen and others have been working on a schedule that is packed with interest and pleasure from the New York departure until the return approximately six weeks later. For detailed information regarding cost of the tour, accommodations, and so forth, beekeepers should write Mrs. W. A. Stephen, Box 92, Cary, N. C. The tour is being kept in the moderate price range.

Tentative plans are to visit Britain first, including a stop at Brother Adam's famous apiary (see picture in February Journal, page 68), the Rothamsted Experiment Station and Taylor Apiary and Bee Supply Co. in Welwyn as well as Heather Apiaries in Scotland. From England the group will fly to Norway, making Oslo its headquarters with scenic tours and stops of beekeeping interest there and in Sweden. From Stockholm plans are to proceed to the Congress in Copenhagen. The well-rounded Congress program will include besides excellent speakers, a variety of interesting tours. Good interpreters will be provided so that everyone can benefit from the sessions.

These plans form the first installment of the tour. More will be given in the next issue. Remember for more details to write Mrs. Stephen. This is a wonderful opportunity to combine a European tour with attendance at the Congress.

Frank Todd of the USDA laboratory at Tucson, Arizona, watches the entrance to a hive in Brother Adam's beehouse in the midst of a beautifully landscaped garden.



## Wisconsin State Beekeepers Assoc. District Meetings

The Wisconsin Association is preparing for the round of district meetings that has become an anticipated service to beekeepers just before the season's work starts. The summer meeting repeated at northern and southern locations and annual convention complete the formal get-togethers each year.

This year's meetings will be held at: Beaver Dam, March 13; Janesville, March 20; Appleton, March 30; Marshfield, March 31; LaCrosse. April 1; Barron, April 29 and Superior, April 30.

The proposed program will be repeated at each of the above times and places as follows:

10:00 A.M.—Call to Order, District Chairman.

10:05 A.M.—Outlook for 1954, Wm. Judd, President State Ass'n.

10:15 A.M.—Present Condition of Bees and Winter Loss, discussion conducted by District Chairman.

10:45 A.M.—Package Bees Easy to Manage (16 mm. film).

11:30 A.M.—Your State Association, Allan Vosburg,

11:45 A.M.—Business Meeting, District Chairman.

12:00 Noon-Recess.

1:00 P.M.-Report from Advertis-

ing Comm., Art Kehl.

1:30 P.M.—Easy Requeen and Swarm Prevention, Henry Schaefer, Harold Richter.

2:00 P.M. — Beekeeping Through the Year as Practiced by Dr. C. L. Farrar (Colored Film), H. J. Rahmlow.

2:45 P.M.—Bee Disease in This District and Plans for 1954, John F. Long, Chief Apiary Inspector.

Allan R. Vosburg, Sec'y

#### Palmetto State Beekeepers' Association Spring Meeting

Columbia, S. C., March 17

The Palmetto State Beekeepers' Association will hold its spring meeting March 17 from 9:00 A. M. to 4:00 P. M. at the Jefferson Hotel, Columbia, S. C. Many subjects of interest to beekeepers will be discussed at this meeting, such as marketing, queen rearing, diseases and their control, pollination, swarm control, and others. We urge any interested beekeeper or farmers interested in pollination of such crops as apples, cucumbers, and legumes for seed, to attend. You do not have to be a member of the Association to attend.

J. Floyd Switzer, Secretary

#### CAUCASIAN Package Bees

#### Lohman Bee Co.

Rt. 2, Box 644, Loomis, Calif.

#### ITALIAN PACKAGE BEES AND QUEENS

Queens, 1 to 10 ... \$1.00 2-lb. pkg., 1 to 10 ... 3.50 3-lb. pkg., 1 to 10 ... 4.50

SATISFIED CUSTOMERS ARE A MUST WITH US.

Live arrival guaranteed, health certificate with each shipment.

#### BAKER'S APIARIES

C. W. Baker, Mgr. Box 214, Livingston, Ala.

#### Yellow Italian Bees and Queens 2-1bs. bees with queen \$2.75 3-1bs. bees with queen 3.75

Queens — \$1.00 each
We guarantee live arrival and
health certificate.

ALVIN J. DUCOTE Hamburg, La.

#### Shipments Begin March 15 on



Rence Brand Queens
1-25 .95 26-up .85
Live delivery guaranteed
Queens Air Mailed, Clipped
on Request. Prompt Shipment.

Silver Hives Apiaries, Enterprise, Fla

#### Northern California Italian Package Bees and Queens

F. E. MORRISON Rt. 2, Box 212-C, Auburn, California

#### Quality Italian BEES AND QUEENS

3-lb. with queen \$3.25 4-lb. with queen 3.75 Deduct 90c for queenless package. Health certificate, full weight and live delivery guaranteed.

THE STAR BEE FARM
Adolph Guilley, Prop.
B.F.D. Box 59
Hessmer, La.

GOOD ITALIAN QUEENS
In Season - Write

WHITE PINE BEE FARMS Bockton, Penna.

#### Dadant's Foundation For Bulk Comb Honey

A special, light colored foundation, somewhat heavier than thin super, but lower in price. White, beautiful comb honey packed in glass and surrounded with a fine grade of liquid honey is a package that customers just want to buy.

DADANT & SONS, Inc.

Dadant's for Honey Labels

# --- SHORTS ---

Just Watching . . .

One balmy day in October I spent some time watching beside a clump of late flowers. It was surprising to see what a variety of insects came in search of something. Butterflies sipped the nectar and flitted about carelessly in the sunshine. Honey bees eagerly sucked the scant supply of sweet and filled their baskets with the pollen. Several varieties of beetles were feeding there.

I was impressed with the fact that the honey bee seemed to be the only visitor that paid its way. A caterpillar was busy eating the heart from one of the flowers destroying the hope of any seed. A crab spider awaited an unfortunate insect for its dinner. There is an amazing series of events going on under our eyes of which we are entirely unconscious.

Frank C. Pellett (A.B.J., page 498, December, 1932.)

Newman Lyle Says . . .

Unless bees have foundation to draw, they will use wax to build additional burr combs.

For a honey crop, the emphasis should not be on the total number of adult bees but on the total amount of brood that will soon emerge when the honeyflow approaches.

When bees want to secrete wax, let them. It will help prevent swarming.

In supering bees, remember most of us put on too few supers early and too many supers too late.

#### REFLECTORIZED SIGNS

Beaded in glass—shines at night— Heavy metal, 14x20 inches, black on yellow. Flanged one end to nail on post or tree. New—different!!! Say "Honey" both sides. Each, \$2.50.

Dadant & Sons, Inc.

# The Market Place . . .

#### BEES AND QUEENS

GOLDEN ITALIAN QUEENS that produce large gentle bees, excellent honey producers. Price, \$1.00 each. Live arrival and health certificate guaranteed. Alvin J. Ducote, Hamburg, La.

LIGHT 3-BAND ITALIAN bees and queens—3 pounds with queen, \$4.75; 4-lbs., \$5.75; 5-lbs., \$6.75. Queens, \$1.10. Bees shipped prepaid. Luther Pickett. Owner, Orange Bee Co., Efland, N. C.

THE NORMA ROY APIARY Italian bees 3 pounds with queen, \$3.50; 4 pounds with queen, \$4.25. Live delivery and healt certificate with shipment. Norma E. Roy & Son, Hessmer, La.

GOLDEN ITALIAN QUEENS at \$1.00 each. Their bees are large and yellow, and very gentle. Good honey producers. We guarantee live arrival and health certificate. Allen H. Gauthier, Hamburg, La.

CAUCASIAN QUEENS—Personally raised from my own and breeders direct from 'Hastings' of Canada. Good honey gatherers, gentle, hardy, \$1.10 each, after April 20th. Fred Brock, McDonald, Tenn.

CAUCASIAN and CARNIOLAN BEES—2-1b. pkg., \$3.00; 3-1b. pkg., \$4.00. Untested queens, one, \$1.00; one hundred, \$75.00. Tillery Brothers, Greenville, Ala.

DARK ITALIAN QUEENS—600 lb. strain, bred for production, \$1.00. With 2-lbs. of bees, \$2.80; with 3-lbs. of bees, \$3.65. Henry Loehr, Caldwell, Texas.

YELLOW ITALIAN BEES—Real producers. Health certificate. Satisfaction guaranteed. 2-bs. with queen. \$3.70; 3-lbs., \$4.70; 4-lbs., \$5.70. Queens, \$1.20. O. E. Brown, Rt. 1, Asheboro, N. C.

ITALIANS—Packages, queens. Martz, Rt. A2. Box 846. Vacaville, Calif.

10-FRAME single story colonies of bees with young laying queens delivered loaded on your conveyance at our place. Write for particulars. P. M. Williams, Castleberry, Ala.

#### FOR SALE

HONEY BUSINESS in Texas' Rio Grande Valley. 2 acres. small home and honey house, all for \$2,350. Kashfinder, Wichita, Kans.

FIVE GALLON CANS—Used, 20c each: washed and sterilized, like new, 30c each. R. W. Barnes & Sons, Oakland, Neb.

FOR SALE—171 colonies of bees in 2 10-frame hive bodies (with equipment to run 250 colonies). This equipment (all 10-frame) includes 580 boxes with full drawn comb, 325 empty boxes, 250 metal queen excluders, some bottoms and covers. Also the following Neises equipment all made of stainless steel, 30-frame extractor with cover and ½ H.P. motor, 100-gal, pasteurizing tank with cover (extra large), 4-basket filter with cover (extra large), 4-basket filter with cover, capping dripping tank with 3 baskets, large capping melter (galvanized), and many other articles. Nicollet County Nursery, St. Peter, Minn.

200 EIGHT FRAME colonies with 400 shallow supers, \$9.00 each. Also small dwelling and workshop if desired. J. W. Lunsford, Ludowici, Ga.

1 STEAM uncapping knife, 1 45-frame Simplicity extractor, 3 1500-pound tanks, 2 good boilers, 1000 supers full depth of drawn comb, 200 tops and bottoms, 100 queen excluders, H. B. Keller, Apt. A. Grell Court, Council Bluffs, Iowa.

700 COLONIES, home, shop, etc., at Ban-croft, Idaho. Ernest Galloway, 123 W.
 6th So., Salt Lake City, Utah.

SIXTY DOUBLE UNITS, metal covers, drawn combs, extractor, knife. Reasonable. Palmer Faragher, Watertown, So. Dak.

FOR SALE—Five acres near fine town. New seven-room all-modern house, 24 x 28 x 10 new cement block warehouse. Equipment and drawn combs for 250 colonies of bees, new Root 50-frame extractor with motor, honey pump, tanks, five-horse steam boiler, gas heated, two years old. City water; gas for heating, 1949 two-ton Chevrolet truck, with rack, just overhauled. Fine locations; some seed pay for pollination starting in 1954. Will sell all or separately. Must sell because of ill health. Write or phone W. R. Jewson, 7 N.W. 4th St., Faribault, Minnesota. Phone 4-4688.

7 THOUSAND STANDARD 91/4" brood frames K.D. for sale. Saw cut top, solid bottom. Ted Meyer, 540 Peosta, Helena,

COMPLETE HONEY EXTRACTING and packing outfit—capacity 3600 pounds a day. Senior Brand capping melter, drain table, 20-frame Root Simplicity extractor with motor, 3 compartment 100-gal, sump. Neises deep clarifier and filter, gear pump with jack, motor, float with toggle switch and fittings, 200-gal, settling tank with heater steam boiler gas burner, storage tanks, gates, wax press, 100 10-frame excluders, Smith-Corona 7 column adding machine. Elges, Griswold, Iowa.

8 COLONIES Italian bees, 1½-story, 10-frame. No disease. Ample stores, \$7.50 each. Jay Barr, Lamoni, Iowa.

FOR SALE-150 colonies bees. James Vieley, Fairbury, Ill.

300 — 10-frame and 20 Modified colonies bees for sale or lease. Paul Madison, Winnebago, Nebr.

125 GOOD FACTORY MADE 8-frame empty hives for extracted honey. No disease. John Burghardt, 1111 N. Franklin, New Ulm Mine.

40 COLONIES, food chambers and three supers. Morehouse Brothers, Montevideo, Minn.

400 10-fr. colonies bees at Blackfoot, Idaho, with equipment for over 500. Cozy Nook Apiaries, 313 W. 138 St., Hawthorne, Calif.

FOR SALE OR TRADE—Morgan Apiaries, located at Brooks, Alberta, on the new paved trans-Canada highway. All or part of 1200 colony complete outfit. Located in the center of a vast irrigated area famous for its extra white No. I honey. No dark honey produced. No crop failures in my 23 years here. My best colony average for the whole outfit spring count was 363 lbs. Average annual production 75 to 100 tons a year. Will sell bee equipment for one-half price and rent or trade land and buildings and new house for California real estate. Will supply high production queens and teach the new owner the very necessary "Know How" from my 43 years De La Guerra, Santa Barbara, Calif.

HONEY HOUSE 16 x 48 ft., 2-story, with lean 8 x 48 ft. John Schroeder, Wentworth, S. Dak.

FOR SALE—10-frame bee equipment, 1200 full depth bodies, 300 metal tops with inner cover, bottom boards, 1 1-h.p. bolier. Russell D. Smalley, Beaver, Iowa.

FOR SALE — Johnson dovetail machine, complete without motor, Price \$80.00. Dr. G. C. Dalphond, North, S. C.

FOR SALE—750 colonies of bees, double brood chamber, all young queens. Bees are in excellent condition, no disease. Approximately 2000 supers, new truck, extracting equipment and honey house. This business is owned by widow who is unable to handle and must be sold. This is a fine business for the right party. Little Horn Apiaries, Hardin, Mont.

50 COLONIES of Italian bees near Medford, Oregon. Lots of surplus honey, Good hives, regularly inspected. Amos Harker, Box 131, North Hollywood, Calif.

#### HONEY and BEESWAX WANTED

WANTED—Clover honey. Send sample and lowest price. Ben Hughes Honey Co., Rt. 7, St. Joseph, Mo.

WANTED — White honey in 60-lb. cans. Send sample. John Tideswell, 2711 No. 63rd St., Omaha, Nebr.

HONEY WANTED—Large quantities. All grades. Cash price. Send samples. Finger Lakes Honey Coop., Groton, N. Y.

WANTED-Honey, amber or light, in any amount. Send sample for prices. Holland Honey Cake Co., Holland, Mich.

HONEY WANTED—All grades and varieties. Highest cash prices paid. Mail samples. State quantity. HAMILTON & COMPANY, 2613 South Yates Ave., Los Angeles 22, Calif.

WANTED — Water white clover honey, truck or car lots; also light amber. Mail sample and lowest cash price. Write Stoller Honey Farms, Latty, Ohio.

HONEY AND BEESWAX WANTED in trade for supplies or cash. Hodgson Bee Supplies Ltd., 565—13th Ave., New Westminster, B. C., Canada.

WANTED — Extracted honey, white or light amber, in 60's. State price in first letter. Ed. Heldt, 1004 W. Washington St., Bloomington, Illinois.

WRITE FOR SHIPPING TAGS and current quotations on rendered beeswax. Any amount from one pound up bought. If you have 25 pounds or more, save 25% by letting us work it into foundation for you. Walter T. Kelley Co., Clarkson, Kentucky.

CASH PAID for white and amber extracted honey. Send samples and state quantity available. Prairie View Honey Co., 12303 Twelfth St., Detroit 6, Mich.

WANTED—Extra white and light amber honey. Let us ship you the containers. Sell us your honey for CASH on delivery. The Hubbard Aplaries. Manufacturers of Bee Supplies and Comb Foundation. Onsted. Michigan.

#### HONEY FOR SALE

WHITE CLOVER HONEY in sixties. Ralph Gamber, 910 State, Lancaster, Pa.

#### SUPPLIES

FOR SALE—150 eight-frame hive bodies. 75c each; fifty ten-frame, \$1 each. 100 ten-frame comb honey supers, from 25c up. Several hundred eight and ten-frame bottoms, inner and outer covers, 10c and up. 600 newly wired frames at 8c each. Shallow extracting supers, 50c each. Nuclei boxes made especially for fertilizing queens, 50c each. H. G. Quirin, Bellevue, Ohio.

STANDARD tops and bottoms, painted and assembled, \$1.00 each. 11254 Linden St., Lynwood, Calif. NE 63940.

ROBINSON'S "WAVY-WIRED" FOUNDA-TION—A superior product at a lower price. Also plain foundation. We work your wax, and render combs and cappings. The only foundation plant in the East. Robinson's Wax Works, Rt. 3, Auburn. N. Y.

THE BIGGEST BEE SUPPLY CATA-LOGUE PUBLISHED (64 pages) free for the asking. Big factory manufacturing a complete line of wooden goods, comb foundation, metal goods, veils and gloves, carloads in stock, daily shipments, save 20%. WALTER T. KELLEY CO., CLARK-SON, KENTUCKY.

BEE SUPPLIES—Tin packages, 10 sizes glass jars, paper shipping supplies, window cartons and other items. Roscoe F. Wixson, Dundee, N. Y.

Electro Filling Machines, users and distributors. Write Stoller Honey Farms, Latty, Ohio.

WRITE FOR CATALOGUE. Quality bee supplies at factory prices. Prompt shipment. Satisfaction guaranteed. The Hubbard Aplaries, Manufacturers of Beekeepers' Supplies, Onsted, Michigan.

#### HONEY LABELS

Improved designs, embodying color, balance, simplicity, and distinction.

Please send for free samples & prices. C. W. AEPPLER COMPANY

Oconomowoc, Wisconsin

#### POSITIONS AND HELP WANTED

EXPERIENCED BEEKEEPER wants employment in southern California. L. D. Davis, Rt. 7, Box 3641 L. Sacramento, Calif

WANTED—Two men to work in our plant and apiaries. Experience not essential. Good wages, bonus, other benefits. Schultz Honey Farms, Ripon, Wis.

TWO YOUNG MEN want work, 50c hr. 229-15 St., Safford, Ariz.

RELIABLE married man, year around work Modern home, bonus. Give wages expected in first letter. Henry's Honey Farm, Red Granite, Wis.

#### WANTED

WANTED-800 two and three pound packages of bees for middle to last of April. Write Box 27, c/o American Bee Journal.

WANTED—Complete bee outfit in Midwest to run on shares, with option to buy. Floyd Stumph, 489 Woodland Ave., Mans-field, Ohio.

#### SEEDS AND TREES

FLOWERS YOU WILL LIKE—The bees will too. For your planting this spring, select trees, shrubs, unusual perennials which suit your purpose well and are been nectar plants, Send now for most complete HONEY PLANT catalogue, free. Illustrated actual photos. Pellett Gardens, Atlantic, Iowa.





# thickening

...in the breast or elsewhere -is the second of the seven commonest danger signals that may mean cancer...but should always mean a visit to your doctor.

The other six danger signals are- Any sore that does not heal 2 (above) 3 Unusual bleeding or discharge 4 Any change in a wart or mole 5 Persistent indigestion or difficulty in swallowing 6 Persistent hoarseness or cough Any change in normal bowel habits.

For other facts about cancer that may some day save your life, phone the American Cancer Society office nearest you, or write to "Cancer"-in care of your local Post Office.

American Cancer Society

#### MISCELLANEOUS

KNOW interesting facts about the bees of India through the INDIAN BEE JOUR-NAL, published in English by the Bhupen Apiaries (Himalayas), Ramgarth, Dist. Nainital, U.P., India, and obtainable from them. Subs. Rs.9/-, or \$15/-, or \$2.25 yearly. Sample copy, post free. Rs.18/-, or S.2/6 or 40c (International money order). Payment in mint postage stamps of your country accepted.

AMAZING NEW SUGAR CORN terrific for garden. Circular free. Box 5, Cincinnati 13, Ohio.

BUSINESS CARDS, fine raised printing, thousand \$4.65 prepaid. Request samples, type chart. Sauer, 1342 Springfield Ave. Irvington 11, N. J.

RANCH MAGAZINE—Do you find it diffi-cult to secure information about sheep and sheep ranching methods? The SHEEP AND GOAT RAISER reaches more sheepmen with more information of range sheep than any marszine published. Subscription \$1.00. Hotel Cactus, San An-

SECTION COMB HONEY production steps—\$1.00. Comb Honey Production Glossary—50c. United Industries, Dept. K, Box 449, Madison 1, Wis.

#### A GOOD RULE . . . .

We in Maryland years ago forgot about formality, and rules or regulations. We just get together and do it. Harold L. Kelly, President. Maryland State Association.

#### Bees' Struggle . . .

"Bees' struggle" is a strange phenomenon, first observed by Dr. E. E. Leppik and his co-workers from Bayaria (see American Bee Journal No. 11, 1951:462) and noticed later by beekeepers in Germany. phenomenon has been confirmed also by Dr. Karl von Frisch.

Fritz Bolle, a German biologist and writer, points out ("Orion" in Munich, No. 10, 1952) that the real bees' struggle is no less fascinating than the stories about insect wars. The discovery of bees' struggle is a real contribution to the problem of protection of bees and other pollinating insects against the misuse of strong nerve poisons such as the new insecticides

Our latest insecticides, on the basis of phosphorous, are some of the strongest nerve poisons. A very small amount may start the bees' struggle in beehives. As soon as these new insecticides are put into mass use where bees are, beekeepers will have to exercise considerable caution to prevent losses.

#### EARLY PACKAGES

Do you have trouble getting your packages early enough? We begin shipping regular stock March 20 and Starline stock April 1.

Write for prices.

ADBA

J. M. CUTTS & SONS

Box 336

Chipley, Florida

#### THREE BANDED ITALIAN BEES AND QUEENS

Liberal overweight packages. Baby bees, Young mated queen with each package. Postage or express. For postage allow for—2-lb. pkg., 6 lbs.; 3-lb. pkg., 8 lbs., and 20c for special handling. Shipping begins April 1st.

| o tos., and goe for special hand | Oueens          | 2-lb. w/q     | 3-1b. w/     | q     |
|----------------------------------|-----------------|---------------|--------------|-------|
| 1-24                             | \$1.00          | \$2.85        | 83.85        | *     |
| 25-99                            | .90             | 2.75          | 3.75         |       |
| For queenless package deduct     | nrice of ollows | 2.60          | 3.60         | Bo    |
| early in order to get dates wan  |                 | Lave delivery | Eddi anteca. | A.Pr. |

LUCEDALE APIARIES

Lucedale, Mississippi

#### The New Bee Book Behavior and Social Life of Honeybees

by C. R. Ribbands



Here is an outstanding book brought out on bee behavior. Not a management book, yet daily useful in your apiary problems.

A summation of the research of many men as well as the experience of Ribbands himself in his work at Rothamsted in England. We recommend this book most highly as a MUST for every beekeeper's library.

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#### 3-Banded Italian BEES and QUEENS

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#### FRAMESPACERS

The finest thing ever offered beekeepers. See your dealer or write.

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# Crop and Market

by M. G. Dadant

#### Moisture Conditions

There has been increased moisture over considerable areas of the country during the last 30 days. Extremely dry conditions still prevail however, in southern Illinois, Iowa, Missouri, western Oklahoma, Kansas, Nebraska, eastern Dakotas and Colorado, portions of New Mexico and Arizona, and southern California. Most of the other sections of this country as well as Canada report good precipitation either as rain or snow. Late February brought some good soil-soaking rains into the Illinois-Iowa-Missouri area. Here at Hamilton we had a one and onehalf inch rain - the first such amount in over thirteen months. All of the states named above will need considerable rainfall this spring to bring sub-soil moisture back up to

#### Colony Activities

The southern half of the country reports that bees have been gathering pollen since the first part of February. Unseasonable warm weather in mid-February brought about soft maple blooming and pollen gathering as far north as central Illinois. Most other sections of the country expect pollen to be available from mid-March to the first of April. Pollen gathering activity will probably be only slightly later than this in Canada-the latest date given by reporters being April 20. Many sections of this country have reported unseasonably warm weather so far this winter and it is expected that brood rearing and rapid consumption of stores has occurred in such areas

#### Crop Movement

The expected trend toward a short supply of 1953 honey seems to have Only a very small amount of table grade honey is still in the producers' hands and reports received here would indicate that packers are conserving their supplies in attempts to keep their customers stocked until the new crop is harvested. The 1953 crop was 18 per cent less than 1952 and the smallest crop since 1948. Canadian reporters indicate that all table grades of honey at the producer level will be sold before the new crop and that some packers will be in quite short

#### Honey Production-1954

Reporters were asked the following question: Did vou produce cutcomb honey in 1953? Will you in 1954? A surprisingly large number of the reports received indicated that they did produce cut-comb honey in 1953 and were going to again in 1954. The important point was the indicated trend toward a larger production of cut-comb in 1954. It is entirely possible that production of this type of honey will go up considerably in the coming honey season. This is of course a very desirable condition for the industry. Comb honey, either in sections or as bulk, is one means available to the beekeeper of increasing his monetary returns from his operations.

It is too early yet to indicate honey production, however southern California bees are already working on eucalyptus-with colonies averaging about three frames of brood apiece. Most of the southern states report bees bringing in some nectar. This is from minor spring sources. however, and the main producing crops are not yet in bloom.

#### Summary

Moisture conditions have improved somewhat since last report, however there is a large mid-continent area that still needs good soil-soaking moisture. Bee activity has increased over the entire southern half of the country, with pollen reported as far north as central Illinois. March should see pollen available to bees over most of the country and even into southern Canada. The 1953 crop is almost entirely out of producers' hands at this time and some packers are already in short supply. It is expected that there will be early buying attempts as a result The year 1954 should show somewhat of an increase in the production of cut-comb honey-a desirable trend for the entire industry.

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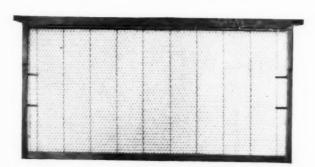
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